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Modern Arabic Science Fiction: Science, Society and Religion in Selected Texts

Barbara Dick

Abstract

This thesis examines a selection of original SF or SF-inflected texts written in Arabic from the 1960s to the present day. It is a thematic study, considering their presentation of and attitudes to science and technology, utopias and ideal societies and religion.

Although some critics attempt to figure SF as a continuation of the *Thousand and One Nights* fantastical tradition and the *mirabile* literature of the Middle Ages, Arabic science fiction, as an essentially modern genre, traces its earliest origins to the late 1950s in Egypt. It has experienced several sudden efflorescences during the following decades in the texts of a handful of authors, most of whom are Egyptian. In the past ten years, following a 2006 seminal essay by Iraqi-German engineer and SF critic Achmed Khammas on “The Almost Complete Lack of the Element of ‘Futureness’”, media and academic interest in Arabic science fiction has burgeoned, with both established (Ahmed Khalid Towfik) and new (Noura Noman) authors publishing in the genre in the past five years.

In light of the relative lack of criticism of the Arabic corpus, this thesis seeks to begin the project of conducting a full critical study through a reading of selected texts from the 1960s to the present day, the majority of which have not previously been translated into English. The approach taken is broadly sociological, examining the texts in the light of three themes outlined above – science, ideal societies and the treatment of religion - that frequently frame SF criticism in English.

Modern Arabic Science Fiction: Science, Society and Religion in Selected Texts

A Dissertation Submitted for the Degree of Doctor of Philosophy by
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12 December 2016

This Dissertation does not exceed 98,000 words in length.

Table of Contents

Abstract and Contents	1
Notes and Acknowledgements	6

CHAPTER 1: ARABIC SCIENCE FICTION

1.1	Introduction	7
1.2	<i>Arabic</i> Science Fiction	12
1.3	Definitions	16
1.4	Selection and Structure	20

CHAPTER 2.1: THEORETICAL APPROACHES TO SCIENCE FICTION

2.1.1	The Right Lens	24
2.1.2	Negative Critical Perception of Science Fiction	26
2.1.3	A New Historicist Approach	28
2.1.4	Reception Theory	30
2.1.5	The Sociology of Science Fiction	30
2.1.6	The Sociology of Literary Taste	32
2.1.7	Science Fiction and Marxist Criticism	34
2.1.8	The Sociology of Arabic Science Fiction	36
2.1.9	Conclusion	40

CHAPTER 2.2: LITERATURE REVIEW

2.2.1	Introduction	42
2.2.2	Achmed Khammas	44
2.2.3	Book-length studies	45
2.2.4	Articles	49
2.2.5	Doctoral theses	52
2.2.6	Conclusion	55

CHAPTER 3: TRANSLATION AND THE ORIGINS OF MODERN ARABIC SCIENCE FICTION

3.1	Translation	57
3.2	The Origins of Modern Arabic Science Fiction	67
3.3	Conclusion	70

CHAPTER 4.1: THE DISCOURSE ON ‘SCIENCE CULTURE’ IN THE ARAB WORLD

4.1.1	Introduction	73
4.1.2	<i>Ānā al-Sharq</i> : Disparaging views of scientific progress in the Arab world	75
4.1.3	Progress	80
4.1.4	‘Islamic Science’	82
4.1.5	The Didactic Function	83
4.1.6	Conclusion	87

CHAPTER 4.2: SCIENTIFIC THEMES IN ARABIC SCIENCE FICTION

4.2.1	Introduction	91
4.2.2	Space and Aliens	92
4.2.3	War Machines	100
4.2.4	Robots	104
4.2.5	Corpus and Animus	112
4.2.5.1	Immortality and the Elixir	113
4.2.5.2	Disease	119
4.2.5.3	Cloning and Genetic Engineering	120
4.2.5.4	Mind Control	125
4.2.6	Scientist Heroes and Villains	127
4.2.7	The Dream of Arab Scientific Dominance: Archaism and Futurism	133
4.2.8	Verisimilitude	140
4.2.9	Time Travel	148

4.2.10	The Ghost in the Machine: Science and Spirituality	150
4.2.10.1	ESP and the Pineal Gland	159
4.2.14	Conclusion	162
CHAPTER 5: RELIGION AND MAGIC: THE SUPERNATURAL IN MODERN ARABIC SCIENCE FICTION		
5.1	Introduction	167
5.2	Arab Utopias	169
5.3	Locus	172
5.3.1	Alternative Loci	180
5.4	Uchronias, or Allohistories: Archaism and Futurism	183
5.5	Internationalism	191
5.6	Government	193
5.7	Labour and Leisure	207
5.8	Colonialism and Race	213
5.9	Israel	218
5.9.1	Other Enemies	223
5.10	Gender	225
5.10.	Queer Sexuality in Arabic SF	244
5.11	Conclusion	244
CHAPTER 6: RELIGION AND MAGIC: THE SUPERNATURAL		
6.1	Introduction	249
6.2	The Role of Religion in Western SF	251
6.3	Religion in Arabic Literature	252
6.4	Religion in Arabic SF	254
6.5	Angels and Demons	272
6.6	Moral Behaviour: Violent Acts	278
6.7	Magical Thinking: <i>Shirk</i> and the Supernatural	283

6.8	Conclusion	292
	CHAPTER 7: CONCLUSION	298
	BIBLIOGRAPHY	309

Transliteration

The *International Journal of Middle East Studies (IJMES)* transliteration system has been used throughout, except when referring to authors, book titles or names of characters for which alternative anglicised versions already exist or have been previously used by other commentators.

Translation

All of the translations from Arabic into English are my own work, except where declared otherwise (for example, I have used Chip Rossetti's translation of Ahmed Khaled Towfik's *Utopia* (Doha: Bloomsbury Qatar Foundation Publishing, 2011.)

Declaration and Copyright

I declare that this dissertation is the result of my own work, and includes nothing which is the outcome of work done in collaboration with others.

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Acknowledgments

I acknowledge with profound thanks the invaluable help and support of my supervisor, Professor Paul Starkey, at all stages during the production of this thesis, and for providing me with my copies of Ahmed Khaled Towfik's *Utopia* in both Arabic and English. I am also deeply grateful to Ahmed Khaled Towfik, who travelled from Tanta to Cairo in June 2013 to discuss his work with me and provided me, unasked, with full copies of Yusuf Al-Sharuni's *Al-Khayāl al-ʿIlmi fī Al-Adab Al-ʿArabī Al-Muʿāsir* and Mahmūd Qāsim's *Al-Khayāl al-Ilmi: Adab Al-Qurn Al-ʿAshrīn*, as well as the contact details of Dr. Nabil Farouk, to whom I am also grateful for the interview granted.

I would also like to thank Professor Christopher Lloyd and other staff at the Department of Modern Languages and Cultures for their comments, suggestions and support. Finally, I would like to thank the Centre for the Advanced Study of the Arab World (CASAW), whose studentship funded this study; I am most grateful.

Chapter 1: Arabic Science Fiction

*No man can have in his mind a conception of the future, for the future is not yet. But of our conceptions of the past, we make a future; or rather, call past, future relatively.*¹

1.1 Introduction

Science fiction is presently in its infancy in the Arab world, with fewer than a hundred novels written by Arab writers in Arabic.² Following the first symposium on Arabic Literature and Science Fiction at the University of Casablanca in April 2006, the Iraqi-German engineer and environmentalist Achmed Khammas, who has published SF stories under the pseudonym Ghassan Homsî,³ identified an absence of major SF works in the Arab world in his seminal essay “The Almost Complete Lack of the Element of Futureness” (many articles found via any internet search for “Arab(ic) science fiction” cite, or heavily borrow from, this source).

The 2006 symposium concluded that “there was much too much Western theory for much too little Arabic material”,⁴ drawing our attention to the relative lack of Arabic SF texts.

Khammas’ essay makes a persuasive and enticing case for a contextual and comparative study of the SF genre in the Arab world, arguing in very general terms that the region struggles with imagination and vision, despite having produced mediaeval Utopias predating Thomas More, and lamenting that “...the Arab world still does not have any academics similar to Fred Hoyle, Isaac Asimov or Carl Sagan”.⁵ Khammas posits a link between the relative lack of interest in Arabic SF and general anomie following the failure of Arab liberation movements, pan-Arabism, socialism and religious political parties, opining that

¹ Thomas Hobbes, *The Elements of Law, Natural and Politic* (1640): Chapter 4:7. <http://www.efm.bris.ac.uk/het/hobbes/elelaw>; quoted as frontispiece by Patrick L. McGuire, introduction to *Red Stars: Political Aspects of Soviet Science Fiction* (Ann Arbor, Michigan: UMI Research Press, 1985).

² Achmed Khammas, “The Almost Complete Lack of the Element of ‘Futureness,’” tr. Don Mac Coitir. <http://www.heise.de/tp/artikel/23/23713/1.html>, accessed 29.2.16. I refer only to whole discrete novels, rather than collections of short stories, or series of novellas in the supernatural / SF genre such as the *Milaff al-Mustaqbal* series by Nabil Farouk, or the supernatural / SF / medical horror novellas of Ahmed Khaled Towfik.

³ Achmed Khammas’ CV. http://www.khammas.de/engl_my_cv.html. Accessed 29.2.16.

⁴ Khammas, “Almost Complete Lack”.

⁵ Perhaps a premature judgment, assuming that Khammas is referring to writers of SF who also work in academic science; Ahmed Khaled Towfik is a professor of tropical medicine; Dr Talib Omran is a professor of astronomy, and Dr Mohammed Al-Ashrî holds a doctorate in geology. This may be a comment on Khammas’ estimation of their work as inferior to those of the three Western authors mentioned, or a lament that the Arab authors are not better known outside their immediate milieu.

...traditional clan and clientele-based structures are not exactly the most fertile ground for the development of Utopias because they derive their sustainability from the preservation of the status quo.⁶

Khammas believes that futuristic thinking is generally absent from Arabic literature; that, faced with rigid regimes and the negative effects of globalisation, Arabs prefer to hark back to their past, and that the lack of interest in SF (which for Khammas is almost synonymous with futuristic literature), merely reflects this mood. He cites the experience of Lebanese daily newspaper *An-Nahār* journalists Joumana Haddad and Zaynab Assaf, who could not explain the lack of response to their request for SF short stories in 2006:

No scientific milieu? Cyrano du Bergerac did not have one either, 300 years before Apollo... Not enough imagination? That cannot be right... although Arab phantasy does tend to exaggerate and its verbal art forms are generally to be found in poetry rather than prose. Obsession with bread, sex and survival? Is it not the case that some of the best SF books were written in the light of personal, national or even global disasters?⁷

Haddad and Assaf suggested that part of the reason for this lack was the unsuitability of the Arabic language to the genre. Khammas does not indicate that he supports this view, but he does suggest that the Arab world in general suffers from a generalised sociological and cultural malaise towards futuristic literature.⁸

The relative paucity of Arabic SF was again framed as a problem at the first Convention on Arabic SF held in Damascus in 2007; the main discussion, as described by the Tunisian critic Kawthar Ayed, focussed on “*les raisons possible du fait que la SF fleurisse en occident et non ailleurs.*”⁹ In 2009 the Sudanese-born *Guardian* journalist Nesrine Malik asked “What

⁶ Khammas, *ibid.*

⁷ Khammas, *ibid.*

⁸ At the Arabic Science Fiction panel at the Shubbak festival in London, Jonathan Wright did not find vocabulary in any way problematic in translating science fiction; Hassan Abdelrazzak agreed, although pointing out that Arabic word for alien is literally translated as “space being” (“كائن فضائي”) rather than ‘alien / other’ as such: <http://www.shubbak.co.uk/science-fiction-in-the-arab-world/Shubbak>; conference panel on Arabic Science Fiction, 25 July 2015, accessed 29.2.16.

⁹ Kawthar Ayed, “La Science-fiction Arabe,” *Solaris*, no. 164: p. 165. <http://www.revue.solaris.com/numero/2007/solaris-164i.pdf>. Accessed 29.2.16.

happened to Arab Science Fiction?”,¹⁰ noting the rich tradition of the fantastic in Arabic literature from the *Thousand and One Nights* onwards, combined with a tendency towards nostalgia and evidenced by the popularity of the mediaeval dramas seen on Arab television during Ramadan, and contrasting this with the relative lack of futurism in modern literature of a speculative or fantastical bent. Like Khammas, she attributes this to “malaise...fatalism and helplessness inculcated by years of social and political stagnation”¹¹ – the familiar rhetoric of the rationalization of the perceived anomie commonly used to explain resistance to aspects of modernity in the Arab world. Yazan al-Saadi infers an “inferiority complex” from the unflattering comparison between the genre’s success in the West compared to the Arab world, casting the Arab texts as “feeble imitations in form, content, and consumption...still trying to gain mainstream legitimacy and canonization.”¹²

The concept of a mutually reinforcing and cross-fertilising stream of ideas between SF and actual scientific discovery, invention and technological progress forms the basis of a argument particularly popular among certain critics, perhaps because it gives the literary discussion an edge of social justification in an age of burgeoning Arab population and in the context of the public debate on what constitutes valuable social and economic development. The Egyptian-American writer Sifāt Salāmāh explicitly takes the view that the prime importance of SF lies in its ability to stimulate academic and scientific thinking – a belief also enthusiastically espoused by Asimov¹³ - blaming Arab education systems for their failure to facilitate this, and arguing for the importance of the SF genre to the development of the younger generation, and its function as an enabler to create the next generation of scientists and academics. Salāmāh argued that Arab children’s creative abilities and scientific curiosity were being stifled as a result of the lack of futuristic, science-oriented literature:-

The importance of the SF genre of literature lies in its ability to stimulate the reader's creative phantasy and strengthen his/her ability to envisage imagined scenarios. It is indeed necessary to develop the ability to invent and to discover

¹⁰ Nesrine Malik, “What Happened to Arabic Science Fiction?,” *The Guardian*, 30 July 2009. <http://www.guardian.co.uk/commentisfree/2009/jul30/arab-world-science-fiction>, accessed 29.2.16.

¹¹ Ibid.

¹² Yazan al-Saadi, “Arabic Science Fiction: A Journey Into the Unknown”, published in *Al-Akhbar*, 3 June 2012, <http://english.al-akhbar.com/node/7995>, accessed 29.2.16

¹³ “The contribution Science Fiction can make to society is that of accustoming its readers to the inevitability of continuing change and the necessity of directing and shaping that change rather than opposing it blindly, or blindly permitting it to overwhelm us.” Asimov, quoted by Reuven Snir, “The Emergence of Science Fiction in Arabic Literature,” *Der Islam* (2000) vol. 77, no. ii: p. 279.

creative and exceptional children at an early stage, so that our Arab world can receive a generation of inquisitive scientists and academics.¹⁴

The full article, published in *Ash-Sharq al-Awsat* in 2005, is entitled “The Teaching of Science Fiction...A Future Necessity, not a Luxury”. Salāmah’s argument is simple; SF is a stimulant of creative and scientific thinking, and, in her words, a “mirror of the most up-to-date scientific achievements”.¹⁵ She claims that SF actively plays a role in scientific discovery, citing as an example the alleged influence of H. G. Wells’ *The World Set Free* on the Hungarian-American physicist Leo Szilard,¹⁶ and arguing that the Western world already understands this connection, incorporating SF in the educational literature curriculum and including its study within university departments, while the Arab world regards this type of literature with suspicion.

Khammas further suggests that religious reservations about predicting the future may also affect the genre’s popularity in the Arab world.¹⁷ Istvan Csicsery-Ronay Jr. also identifies religious tradition as a potentially restrictive factor affecting the development of ‘world’ SF, claiming that religious codes can militate against cultural innovation.¹⁸ This idea of a binary opposition between technology and transcendence recalls Edward Said’s account of Kissinger’s assertion that certain cultures have a deeply ingrained opposition to empiricism, because they have not had their own Enlightenment and remain trapped in a ‘pre-Newtonian’ world-view.¹⁹

¹⁴ Şifāt Salāmah, “Tadrīs Al-Khiyāl-Al-‘Ilmī...ḍarurat mustaqbaliyāt wa laysa tarfān.” Newspaper article in *Asharq Al-Awsat*, Issue 9683, 2 July 2005.

¹⁵ Ibid.

¹⁶ Szilard read this novel, which predicted the development of the atomic bomb, in 1932. The following year he formulated the idea of a nuclear chain reaction that resulted in the building of the bomb during the Second World War. <http://www.jewishvirtuallibrary.org/jsource/biography/Szilard.html>. Accessed 29.2.16. The principle was also operative in reverse: Wells’ study under Huxley and his views on evolution helped to inspire *The Time Machine*. Charlotte Sleigh, *Literature and Science* (Basingstoke: Palgrave Macmillan, 2011), p. 142, but according to Broderick, Asimov’s opinion as both SF writer and research scientist was that most SF was not predictive; Damien Broderick, *Reading by Starlight* (London: Routledge, 1995), p. 54.

¹⁷ Khammas, “Almost Complete Lack”.

¹⁸ Istvan Csicsery-Ronay Jr., “What Do We Mean When We Say “Global Science Fiction”? Reflections on a New Nexus”, *Science Fiction Studies*, Vol. 39 (2012), p. 482. Also see his suggestion that SF’s possibilities in Arabic or Persian may be limited: “Chinese, Spanish, Portuguese, Turkish, and other languages of ascending technopolitical influence, are endowed with a similar flexibility for the development of popular technoscientific discourse, and consequently of sf. Others, like Arabic and Persian, may be constrained by a conservative cultural loyalty to their classical stratum; such loyalty limits the possibilities of sf”. Istvan Csicsery-Ronay Jr., *The Seven Beauties of Science Fiction* (Middletown, CT: Wesleyan University Press, 2008), p. 15.

¹⁹ Edward Said, *Orientalism* (London: Penguin, reprinted 2003), p. 47. Also see Bernard Lewis’ asseveration that “The Renaissance, Reformation, even the Scientific Revolution and the Enlightenment, passed unnoticed in the Muslim World.” Bernard Lewis, *Islam and the West* (New York: Oxford University Press, 1993), p. 183.

The term ‘transcendence’ here is broadly used to denote supernatural or Todorovian ‘marvellous’ elements in SF, including both orthodox and unorthodox religious belief, as well as the supernatural in general. For the Panshin brothers, transcendence is SF’s secret agenda: “the very serious business of reestablishing transcendence in all its guises, and the reinvention of high myth”,²⁰ and is part of a continuing war between the defenders of ‘spirit’ and the materialists who championed the Age of Technology. The transformation of fantasy into reality in the real world had diminished the transcendent aspect of the literary genre:

All the old super-scientific wonders so long imagined in science fiction stories – rockets, computers, television, atomic power – were beginning to come true. As they did, they were ceasing to be transcendent.”²¹

The Panshins suggest that the pleasure of SF comes partly from the enjoyment of the transcendent element known as the ‘sense of wonder’ – something that the Marxist SF critic Darko Suvin derides as unproductive, on the grounds that it sublimates and therefore wastes the energy necessary for political change in pointless fantasy.²² The tension between the importance of this transcendent element, set in opposition to secular Utopian or specifically technological fantasies of a better world, of the Enlightenment binary opposition between technology and transcendence, will be the main focus of this study, particularly with regard to how the texts present the future to an Arab audience.²³

The perception that the genre has been imported from the literature of colonial powers may also be a bar to the development of an SF-reading culture in the Arab world: Reuven Snir’s

Neil Davidson in “Islam and the Enlightenment,” *Socialist Review* (March 2006), discusses the question of why the Islamic world apparently failed to experience the Enlightenment. Islam’s defenders point out that the European Enlightenment appropriated Muslim societies’ scientific discoveries, or argue that Islam and ‘science’ are not mutually oppositional, and that the binary, which normally favours the Judaeo-Christian nature of the Enlightenment, is mistaken as in fact there was fierce opposition to it from those quarters. He suggests that attitudes to scientific discovery depended more on other factors in society than religious belief, such as for example the nature of the power of the state and its relation to the economy; religion could serve the ends of rulers opposed to new scientific thinking, but it is the alliance to the source of political and economic power that is the crucial factor. (These issues will be addressed in more detail in Chapter 4.1.)

²⁰ Alexei and Cory Panshin, *The World Behind the Hill: Science Fiction and the Quest for Transcendence* (Los Angeles: Jeremy P. Tarcher, 1989), p. 11.

²¹ *Ibid.*, p. 409.

²² Darko Suvin, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* (New Haven, CT: Yale University Press, 1979), p. 25.

²³ Recalling that the text’s future is inextricably bound up with the author’s present, Gwyneth Jones echoes William Gibson’s view that science fiction, even when apparently futuristic, is really always about the present. Gwyneth Jones, *Deconstructing the Starships* (Liverpool: Liverpool University Press, 1999), p. vii.

article “The emergence of science fiction in Arabic literature”, speaks of the perception of ‘ghazw thaqāfi’ (cultural aggression) in the perceived appropriation by Arab authors of what is viewed as really a Western genre, a potential Trojan horse for the importing of atheistic Western ideas.²⁴ This article is one of the few that deals exclusively with Arabic SF; the authors of the leading general works on modern Arabic literature (Allen, Badawi, Cachia, Hafez, Starkey), do not mention it (except for Cachia, who is dismissive.)²⁵

SF in its modern incarnation as a literary phenomenon is Western (American/French/British/Russian) in origin, if we accept Verne and Wells as its originators and the American pulp writers as its early mass popularisers. There is a danger that Arabic SF could be seen as a Western literature in Oriental drag; at worst, the Arabic language merely a magnificent casing for the import of a secular, anti-religious agenda from the West. The question of the reason for the minority status and marginality of SF literature in the Arab world, in comparison to its much greater popularity in the West, has been framed by Khammas and others, but, as Jacquemond reminds us, when we speak of minority or special-interest literature in Egypt, for example, the relative cultural status or hierarchy that operates between the authors and their audience itself makes the masses a status minority.²⁶ We should of course not disregard the impact of mass illiteracy upon both production and consumption, but within the context of the existing readership the question of what is read, and why, is still of interest.

1.2 Arabic Science Fiction

Why frame the boundaries of a study of a literary genre by the language in which it is originally produced, and how valid is any such distinction likely to remain in a globalised society, where translation increasingly facilitates the flow of that literature in both directions across the linguistic divide? Csicsery-Ronay Jr. recalls the pre-globalisation mind-set of SF critics, who once proudly cast themselves as noble defenders of the minority literature that was ‘global science fiction’, that is, the SF of the non-English speaking world: “feisty minor literatures who [sic] enjoyed our recognition and support as we kicked sand on the

²⁴ Snir, “Emergence of Science Fiction,” pp. 263 - 285.

²⁵ Pierre Cachia, *An Overview of Modern Arabic Literature* (Edinburgh: Edinburgh University Press, 1990), p.173.

²⁶ Richard Jacquemond, *Conscience of the Nation; Writers, State and Society in Modern Egypt*, tr. David Tresilian. (Cairo: American University Press, 2008), p. 39.

Ozymandias of Imperial SF”.²⁷ His 2012 article “What Do We Mean When We Say “Global Science Fiction”? Reflections on a New Nexus” explores the recent surge of academic interest in non-Anglophone SF, which is starting to discomfit the exultant exclusivity of ‘minority’ SF’s erstwhile defenders (but not to any significant extent to date in the case of Arabic). At present, there are only a few Arabic SF texts available in English.²⁸ The current lack of translation and criticism creates a space for this study in the name of accessibility, but in a post-*Orientalism* world, the question of using language as the defining first criterion of literary study must firstly be addressed.

The study of any Arabic literature from a Western perspective to a certain extent cannot help but position itself uncomfortably within the dark ambit of Orientalism, and finds the Western scholar gazing upon the foreign literature as the ‘other’, keenly aware of Said’s accusation of an “intrinsic hostility implicit in this division”,²⁹ and of the “willed imaginative and geographic division made between East and West” of which he produced such abundant evidence.³⁰ The danger of essentialising a literary genre, and the possibility of bringing cultural stereotypes to a study of literature that is firstly defined by the language of its production, is a real one, but is not exclusive to those writing from outside the culture. Any writer who suggests affinities and commonalities in a study of a literary genre that is defined by language or nationality necessarily runs the risk of making generalisations that may skirt the edges of cultural stereotyping, but this does not necessarily doom the study to adopting a reductive agenda of racist essentialism. A lens applied by a Western critic is *de facto* an Orientalist lens, even though a native speaker of the language in question might produce the

²⁷ Csicsery-Ronay Jr., “What Do We Mean”, p. 478.

²⁸ These include a translation of Moustasfa Mahmoud’s *Al-Khurūj min al-tābūt* (Rising from the Coffin) as *The Rising from the Coffin*, tr. David Bishai, revised by Farouk Abdel Wahab (Cairo: The Arab Writer, undated), and the recent translation of Ahmed Khaled Towfik’s *Ūtūbiā* (Utopia) by Chip Rossetti. (Doha: Bloomsbury Qatar Foundation Publishing, 2011).

²⁹ Said, *Orientalism*, p. 45.

³⁰ Ibid., p. 231; see also p. 233 where Said critiques the concept popular among certain late nineteenth-century sociologists, that the use of a different language automatically signals a corresponding different mind-set or attitude. Also see Fakhri Saleh on the dangers of the idea that Western literature is the comparative standard (in particular, of the Arab novel, which, Saleh contends, owes more to Arabic narrative tradition than to direct imitation of the Western form) inherent in both Goethe and Damrosch’s concept of *Weltliteratur*. Fakhri Saleh, “Rethinking World Literature: The Arabic Novel in Non-Western Eyes,” *Qantara.de*. 6 May, 2011. Permanent URL: <http://en.qantara.de/The-Arabic-Novel-in-Non-Western-Eyes/16030c16249i1p492/>. Accessed 29.2.16. However, Jacquemond reminds us that it is the very concept of the national literary space that gave rise to the discipline of comparative literature. Jacquemond, *Conscience*, pp. 109 – 110.

same conclusions; it is suggested that there may therefore be an inbuilt disadvantage in occupying an alien viewpoint, or even seeking to ask the question.³¹ According to Todorov,

...a society chooses and codifies the acts that correspond most closely to its ideology; that is why the existence of certain genres in one society, their absence in another, is revelatory of that ideology.³²

- a concept akin to Hippolyte Taine's idea of a 'national character' of literature.³³ This suggestion of tracing an underlying commonality within a body of texts written in a particular language or milieu need not be crudely reductive or essentialist; if a coherent consistency of ideas can be presented as an hypothesis, it simply forms another part of the debate on the purpose and effect of that literature on the society within which it was produced.

Similarly, Csicsery-Ronay Jr. posits that "genres and their game-rules involve powerful and specific affects [sic] that reveal a great deal about a culture's collective consciousness."³⁴ Robert Scholes, in his introduction to Todorov's *The Fantastic: a Structural Approach to a Literary Genre*, opines that "...genres persist like any convenient codification of cultural behaviour but come into periods of fruition and dominance when most responsive to other cultural needs."³⁵ Scholes suggests a link between the popularity of a genre and the culture of the day, while Csicsery-Ronay Jr. draws our attention to its possible cultural specificity. The broadly thematic examination of Arabic SF proposed by this study has the potential to construct hypotheses about such revelations.

In a literary study with a sociological aspect, the question of defining the reason for the study of a particular field gains greater significance. We are not merely asking what language the texts are written in and then examining them as if the language were a mere comprehension barrier; we are also potentially asking what makes them culturally *Arab*, excavating the chosen language-bounded field for its peculiar archaeologies of cultural meaning, for what they may have to say about the society in which and for which they were written. It is

³¹ The danger implicit in all such projects of 'othering', following Said, is acknowledged by Fredric Jameson in "Third World Literature in the Age of Multinational Capitalism." *Social Text*, 15 (Autumn, 1986): p. 77.

³² Tzvetan Todorov, *Genres in Discourse* (Cambridge: Cambridge University Press, 2000), p. 19.

³³ Rene Wellek and Austin Warren, *Theory of Literature* (London: Penguin Books, third edition, 1973), p. 105.

³⁴ Csicsery-Ronay Jr., "What Do We Mean", p. 480.

³⁵ Tzvetan Todorov. *The Fantastic: A Structural Approach to a Literary Genre*. Tr. Richard Howard, with a Foreword by Robert Scholes (Ithaca: Cornell University Press, 1975), p. viii.

therefore of interest to explore in what ways the perspective of this (arguably) originally-Western literature has been adapted, if at all, to an Arab reception, and whether or not Arabic SF sports specific cultural markers that would make it in some way ‘Arab’, even if the locations and characters no longer had Arabic names. Fredric Jameson’s theory of a literature embodying a national allegory is highly pertinent here, as his view that such literatures “develop out of predominantly Western machineries of representation” is fulfilled by Arabic SF’s origins in imported Western early SF works.³⁶

In his 1989 study of Japanese SF, Robert Matthew makes a bold claim in justification of his subject, contending that it was “the only technology-conscious, forward-looking, and future-oriented literature that stands outside the western framework of ideas and western-dominated discourse”³⁷ – and while it is not the intention of this study to make the same case for Arabic SF, his rationale provokes the question of what qualities make Arabic SF distinctive from the Western canon from which it was originally partially derived.

Modern Arabic SF is an imported genre that has been brought into the Arabic literary fold and adapted for an Arab audience by Arab writers, and, in a globalised world where many non-Western writers produce their own SF, we might assume that this cultural copyright has now largely expired. Globalisation has increased exposure to SF (although perhaps more through film than through literature); Csicsery-Ronay Jr. proposes that even the idea of aboriginality has become blurred, and romantic essentialism is weakened by the realities of “hybridization and migration”.³⁸ A study set of literary works defined by a language-based paradigm must remain aware of the dangers of such essentialism, but ‘Arabic SF’ as a set of defining parameters – language, and the definition of the genre – is no less appropriate as an enquiry than, for example, other studies of Arabic literature that focus on the literary portrayal of nationalism, feminism or Islamism. The claims of Khammas and Salāmah are provocative, all the more so for coming from Arab critics, and require further examination.

³⁶ Jameson, “Third World Literature”, p. 69. He is speaking of the analogy between a protagonist’s destiny and political destiny; this also holds good for a genre. Juan Cole shares Jameson’s belief in his article “Jordan Plans Green Star Trek Theme Park”, which posits that the relative lack of SF in the Arab world is due to its lack of active investment in technological development. *Informed Comment* (blog) at <http://www.juancole.com/2011/08/jordan-plans-green-star-trek-theme-park.html>. Accessed 29.2.16.

³⁷ Robert Matthew, *Japanese Science Fiction: A View of a Changing Society* (London: Routledge and Nissan Institute of Japanese Studies, University of Oxford), 1989, p. 236.

³⁸ Csicsery-Ronay Jr., “What Do We Mean”, p. 479.

1.3 Definitions

It is important to try to define SF for the purposes of this study, in particular in view of the potential for crossover between SF and fantasy/supernatural literature in the Arabic SF discourse, not least so that we do not unfairly pillory Arabic fantasy texts for being insufficiently scientific or futuristic. Even if one regards the definition of ‘genre’ SF as an outdated taxonomy or a classification useful only to fans and publishers, to begin with we may say with Sabry Hafez (quoting Jauss) that setting such parameters is simply the process of establishing the orientating ‘rules of the game’.³⁹

The problem of distinguishing between SF and fantasy has been theorised by Todorov, who defined SF as the place where “...the supernatural is explained in a rational manner, but according to laws which contemporary science does not acknowledge”.⁴⁰ As fiction *per se*, both science fiction and fantasy are technically fantastical,⁴¹ but SF is set apart from the purely ‘marvellous’ (per Todorov) by its reliance upon a scientific or technological premise as a major plot driver; it works within the sphere of the credible, plausible or possible, within that fictional context. Fantastical literature explains supernatural events irrationally through magic, while the Uncanny occupies an interstitial space, where the acceptance of supernatural phenomena may be offered elliptically, but the reader is also offered a rational explanation for apparently impossible occurrences.⁴² It is important to note that it is the attempt at plausibility, rather than the success of the illusion, that admits a text to the SF canon.

There can therefore be no precise taxonomy of SF that separates it completely from the fantastical; it is the job of each critic to mark the point of watershed between the two.⁴³ The commonly perceived distinguishing factors of SF are its orientation towards the use of science and technology, and often a particular focus on the future, as long as the use of science and futurity is an integral part of the drama rather than Lukács’ mere “empty exoticism...produced by estrangement from the present”.⁴⁴ For Jameson, there is an epochal

³⁹ Sabry Hafez, *The Genesis of Arabic Narrative Discourse: A Study in the Sociology of Modern Arabic Literature* (London: Saqi Books, 1993), quoting Hans Robert Jauss, p. 33.

⁴⁰ Todorov, *The Fantastic*, p. 56.

⁴¹ Todorov, *The Fantastic*, p. 167.

⁴² Todorov, *The Fantastic*, p. 25.

⁴³ John Clute has coined a new collective term, ‘fantastika’ to accommodate the genre-blurring texts that defy strict classification - Csiscery-Ronay Jr., “What Do We Mean”, p. 481, and John Clute, *Pardon This Intrusion: Fantastika in the World Storm* (Romford: Becon, 2011).

⁴⁴ Georg Lukács, *The Historical Novel*, tr. Hannah and Stanley Mitchell (London: Merlin Press, 1962), p. 250.

element active in the binary; it is precisely at the moment when the energy of realist historical fiction runs into the sand that specifically futuristic SF emerges as a genre.⁴⁵ We may therefore regard a science-driven element, together with a fictive-realist, plausible or possible tenor as broadly defining aspects of the genre; the use of science, reason and logic to explain the events of what Suvin calls ‘cognitive estrangement’, and “the sense that something in the fictive world is dissonant with the reader’s experienced world”.⁴⁶ Yusuf Al-Sharuni’s study of Arabic science fiction defines the difference in terms of mental exertion. Fantasy is literature without effort, whereas when reading SF you need to make a greater cognitive effort to make the narrative seem real.⁴⁷ Also, the use of science is what separates it from fantasy; it is similar to the difference between astrology and astronomy.⁴⁸

Freedman’s “cognitive continuum of the actual” position differentiates SF from fantasy, and therefore makes it potentially more threatening to the status quo as it theorises what is really possible.⁴⁹ The element of plausibility thus becomes more important as a defining quality. An interesting aspect of this crucial element of possibility (or the convincing artistic impression of it that gives it a veneer of plausibility) is that it brings SF closer to realist writing than to fantasy. In practice, the ceaseless dialectic between the real and the unreal and the space of the possible which exists between them is in a state of perpetual flux in SF, rarely fully committed either to the utterly fantastical or to the thoroughly rational and mundane. Anthony Easthope has noted that:

much mainstream science fiction writing is very close in form to the procedures of traditional realism except for the temporal location – once the premise about a setting in the future is granted, much of the rest follows as it would in George Eliot.⁵⁰

⁴⁵ Fredric Jameson, *Archaeologies of the Future* (London: Verso, 2007), p. 285.

⁴⁶ Edward James and Farah Mendlesohn (eds), *The Cambridge Companion to Science Fiction* (Cambridge: Cambridge University Press, 2003), p.5; see also Suvin, *Metamorphoses*. Suvin pioneered the concept of ‘cognitive estrangement’, and adapting Bloch’s ‘Novum’ to SF – the ‘novum’ being a new idea forming at the point where state-of-the-art knowledge faces impossibility.

⁴⁷ Yusuf Al-Sharuni, *Al-Khiyāl al-‘Ilmi fī Al-Adab Al-‘Arabī Al-Mu’āsir* (Cairo: General Egyptian Book Organisation 2000), p. 38.

⁴⁸ *Ibid.*, p. 88.

⁴⁹ Carl Freedman, *Critical Theory and Science Fiction* (Wesleyan University Press, Connecticut, 2000), Preface, p. xvi.

⁵⁰ Anthony Easthope, Chapter 4 “The personal and the political in utopian science fiction”, p. 55, in Philip John Davies, ed., *Science Fiction, Social Conflict and War* (Manchester and New York: Manchester University Press, 1990).

Csicsery-Ronay Jr. concurs: "Literary SF follows in the stylistic tradition of the realistic novel, despite its many quasi-marvellous elements."⁵¹

The term 'science fiction', first coined by William Wilson in "A Little Earnest Book upon a Great Old Subject" (1851), was itself inspired by Robert Hunt's 'Poetry of Science' (1850),⁵² while the term 'scientifiction', later changed to 'science fiction', was invented by Hugo Gernsback in 1911, when he wrote a story combining scientific discovery with adventure in order to fill space in his 'hard' science journal *Modern Electrics*.⁵³ There has since been no shortage of critical attempts to define SF. In his essay *On the Origins of the Genre*, Paul Kincaid quotes Gary Wolfe's 1986 study *Critical Terms for Science Fiction: A Glossary and Guide to Scholarship*, giving thirty-three definitions⁵⁴ (which Kincaid notes are frequently overlapping and/or contradictory), ranging from the mystical - the Panshin brothers' "literature of the mythic imagination" - to the gnomic - "the history that we cannot know" (Kim Stanley Robinson) - to the grandiloquent (quoting Brian Aldiss in *Billion Year Spree*):

...the search for a definition of man and his status in the universe which will stand in our advanced but confused state of knowledge (science), and is characteristically cast in the Gothic or post-Gothic mould.⁵⁵

Brian M. Stableford offers Donald Wollheim's 1935 formula, which acknowledges the notion of plausibility, or possibility, as the crucial element:

Science fiction is that branch of fantasy which, while not true of present-day knowledge, is rendered plausible by the reader's recognition of the scientific possibilities of its being possible at some future date...⁵⁶

There is of course the risk of the common paraphernalia of SF (robots, spaceships, aliens etc.) being utilised by inferior practitioners as mere exotic decoration, without the intent of using

⁵¹ Csicsery-Ronay Jr, *Seven Beauties*, p. 83.

⁵² James and Mendlesohn, *Cambridge Companion*, p. 19; also see Brian Stableford's discussion on the importance of the poetics of science to Wilson: Brian M. Stableford, *The Sociology of Science Fiction* (San Bernardino, CA: Borgo Press, 1987), pp. 80 - 82.

⁵³ <http://www.dandare.info/info/gernsback.htm>.

⁵⁴ James Gunn and Matthew Candelaria (eds.), *Speculations on Speculation: Theories of Science Fiction* (Lanham, Maryland: Scarecrow Press, 2005), Chapter 5, p. 42.

⁵⁵ *Ibid.*, p. 44.

⁵⁶ Stableford, *Sociology*, p. 83.

scientific thinking as a mode of narrative: SF as costume-drama. The inclusion of such stock artefacts may place a text crudely on the SF spectrum, but it is the particular use that a writer makes of such props, and his purpose - whether that is the creation of a space opera, a complex dystopia, or a fast-paced adventure story to entertain and intrigue children (such as Nabil Farouk's successful *Milaff al-Mustaqbal* series) - that help to define that text as science-fictional.

Damon Knight's reflexive "what we point to when we say it"⁵⁷ remains one of the most popularly quoted attempts at defining SF, and, noting the similar difficulty inherent in defining sport, Kincaid felt forced to adopt Wittgenstein's concept of "family resemblances",⁵⁸ which has the advantage not only of allowing the necessary flexibility of definition, but of including the essential role of the readership in creating the horizon of expectation within which certain works are recognised as operating within the genre. Authors depend upon the readers' intertextual understanding; for Csicsery-Ronay Jr., the world of the SF reader and writer is part of an interdependent 'megatext' created by other readers and writers.⁵⁹

Of the major Marxist theorists of SF, Darko Suvin, Fredric Jameson and Carl Freedman, possibly the most famous and oft-quoted definition is Suvin's:-

a literary genre whose necessary and sufficient conditions are the presence and interaction of estrangement and cognition, and whose main formal device is an imaginative framework alternative to the author's empirical environment.⁶⁰

With a set of parameters loosely in place that allows SF literature to be at once realistic and not-yet-possible, the importance of literature that is real-but-not-quite-real opens up a liminal space within which the author can experiment with volatile subjects at a distance from reality.⁶¹ The benefits to the author working in an authoritarian environment of being able to deny allegorical intent and disclaim any political comment in his fiction is obvious, if of

⁵⁷ Gunn and Candelaria, *Speculations*, p. 44.

⁵⁸ *Ibid.*, p. 47.

⁵⁹ Csicsery-Ronay Jr, *Seven Beauties*, p. 84.

⁶⁰ Suvin, *Metamorphoses*, pp. 7 - 8.

⁶¹ Margaret Hiley sees Lucie Armitt's identification of the liminality in fantastical literature as analogous to Foucault's definition of social transgression. Margaret Hiley, "Aspects of modernism in the works of C.S. Lewis, J.R.R. Tolkien and Charles Williams" (unpublished PhD thesis, University of Glasgow, 2006), p. 16.

limited value in the event of that ruling authority insisting on identifying the inherent criticism and disregarding the defence of the fictional fig-leaf. This is particularly pertinent in many countries of the Arab world. The Saudi Arabian writer Turki al-Hamad has commented “Where I live [Saudi Arabia], there are three taboos: religion, politics and sex. It is forbidden to speak about these”.⁶² SF, as a literature of change and by virtue of its otherworldly setting, is particularly suited to the breaking of such taboos; Starkey notes a tendency in early modern Arabic literature to set novels in ‘foreign’ places to allow the freedom of expression not permitted in a recognisably Arab country.⁶³

For the purposes of this study, SF texts will be considered to be those where the stories are located within a specifically scientific, technological or futuristic framework, and where plausibility or possibility is assumed, but separated from pure fantasy by attachment to a scientific narrative that is referent to, if not fully congruent with, reality.

1.4 Selection and Structure

As the body of Arabic SF literature is not large, the primary task in the selection of texts is not so much to sift through a mass of material as to locate a corpus that exhibits a coherent SF identity and that is sizeable enough to form a credible basis for a thematic examination. While there are three particularly prolific Arab SF authors – the Egyptians Nabil Farouk and Ahmed Khaled Towfik, and the Syrian Talib Omran, who between them have published hundreds of short novellas – the remainder of the current corpus is mainly composed of single or several works by each author.

Khammas traces the origins of Arabic SF as far back as 1957, to the radio plays of Yusuf Ezzedine Issa and the first novel to the same era, though he does not name it,⁶⁴ and, besides the above-mentioned major authors, he also lists the Egyptians Muḥammad Al-Ashrī, Moustafa Mahmoud and Nihad Sherif as significant figures in the genre. Others claim this

⁶² Paul Starkey, *Modern Arabic Literature* (Edinburgh: Edinburgh University Press, 2006), p. 155.

⁶³ Ibid; also see Gouvanic’s study of French SF: “...la SF...est une machine formidablement puissante contre la dominance des discours institués.” J-M Gouvanic, *La Science Fiction Française au Xxe siècle (1900-1968)* (Amsterdam and Atlanta, Georgia: Rodopi, 1994), p. 271, and Kingsley Amis in *New Maps of Hell: A Survey of Science Fiction*, (London: The Science Fiction Book Club by arrangement with Victor Gollancz Ltd, 1962), p. 64: “Few things reveal so sharply as science fiction the wishes, hopes, fears, inner stresses and tensions of an era, or define its limitations with such exactness.”

⁶⁴ This is likely to have been an early work by Towfīq al-Ḥakīm.

title for Towfiq al-Ḥakīm⁶⁵, as do Kawthar Ayed and Syrian critic Muḥammad ‘Azzām.⁶⁶ Clute and Nicholls’ entry for Arabic SF in *The Encyclopedia of Science Fiction* begins, like Khammas’ essay, with reference to proto-SF elements in the *Thousand and One Nights* and the 10th century Utopia of al-Farabi’s *The Virtuous City*, but cites Towfiq al-Ḥakīm as the first modern exponent of the genre.⁶⁷

SF was not a dominant discourse in the Arab world, developing slowly from several seminal works by the earliest writers in Egypt in the 1950s and 1960s. The vibrant journal culture that launched the careers of many Egyptian writers, within which several Arab SF authors did publish unrelated articles, did not include any journals specifically devoted to the genre, or any publications resembling the American pulp magazines of the 1930s. SF-inflected novels and plays appeared, one by one, until the 1980s brought the first serial works of Farouk in Egypt and Omran in Syria. Ayed believes that the genre did not really exist in the Arab world, even when Sherif began to write in the 1970s; the authors themselves were unaware that what they were writing could be called SF.⁶⁸

The majority of the authors were and are Egyptian and Syrian;⁶⁹ Jacquemond notes that Egyptian literature dominated the field in SF as it did in general.⁷⁰ Khammas also mentions two pioneering works by Moroccan authors from the 1970s,⁷¹ and texts by writers from the Gulf and the Levant, published in the 1980s. This study will include some of Al-Ḥakim’s SF-inflected texts, but the main corpus will be composed of texts written between 1964 and 2012. (It should be stressed at this point that, to a certain extent, the selection process has been governed by the availability of texts; some of the rarer, older texts in particular are no longer in print, or were unobtainable online during the acquisition period.) This study cannot

⁶⁵ According to Hutchins, for Fu’ad Dawwara, this was *Rihlat illa al-Ghād* (Voyage to Tomorrow), published in 1958. William Maynard Hutchins, *Tawfiq al-Hakim: A Reader’s Guide* (London: Lynne Rienner, 2003), p. 86.

⁶⁶ Ayed, “La Science Fiction Arabe,” p. 25, and Muḥammad ‘Azzām. *Al-Khiyāl al-‘Ilmī fī al-Adab* (Damascus: Dār Ṭalās lil-Dirāsāt wa al-Tarjama wa al-Nashr, 1994), p. 68.

⁶⁷ John Clute and Peter Nicholls (eds.), *The Encyclopaedia of Science Fiction* (London: Orbit, 1999), p. 49.

⁶⁸ “Nihad Sharif avoue lui-même que qu’il a écrit des textes de SF sans savoir que c’était de la science-fiction, la formule n’ayant pas existé en arabe avant les années 70.” Ayed, “La Science Fiction Arabe,” p. 25.

⁶⁹ As noted by Hechmi Khalladi: “...Ce genre littéraire reste insignifiant par rapport à la production européenne ou américaine où cette littérature futuriste a ses titres de noblesse depuis longtemps.” *Geante Rouge* magazine, edition 15, Summer 2009, p. 34; an article also published in the Tunisian newspaper *Le Temps* on 23 January 2009.

⁷⁰ Jacquemond, *Conscience*, p. 12.

⁷¹ Khammas, “The Almost Complete Lack”. These are Muhammad Aziz al-Habābī’s *Al-Iksīr Al-Ḥiyāt* (The Elixir) (Casablanca: ‘Uyūn Al-maḡālāt, 1988, or Cairo: Dār Al-Hilal, 1974), and Aḥmed Abd Al-Salām Al-Baqqālī’s *At-Ṭawfān al-Azraq* (The Blue Flood), Union of Arab Writers, published 1997, original publication date 1979 (per Khammas).

be an exhaustive survey of the field, but will examine a broadly representative selection of texts; Todorov reminds us that not every book in a genre must be read in order to study that genre, only enough to observe the genre as the “principle operative in a number of texts”.⁷²

The reader may ask why SF film (or its personalised interactive incarnation, gaming) is not included in this study, particularly in light of its huge transnational popularity. Khammas comments that films such as *Terminator*, *Star Wars*, *Alien* and *Blade Runner* are hugely popular among the young, but he uses this to frame again the question of why there is relatively so little interest in the written genre in comparison with the success of both film and literature in the West. Such a study would be of interest, but must be left to another; the focus here will be entirely upon SF in its literary and textual form.⁷³

Chapter 4, 5 and 6 of this study will be devoted respectively to the presentation of ‘hard’ science and technology, to the human science of government and the examination of the utopias, dystopias and political systems presented in the texts and to the treatment of the transcendent, the realm of religion and the supernatural.⁷⁴ These three themes are a frequent feature of non-chronological academic studies of SF,⁷⁵ and this thematic approach will allow us to examine how authors in the Arab world include or exclude the Islamic faith, or other belief systems, whether or not they have positive attitudes towards technology as positive, or are fearful or ambivalent about it, and to analyse whether or not they offer an exploration of alternative political and social organizational possibilities. In particular, the study will focus

⁷² Todorov, *The Fantastic*, p. 3.

⁷³ One Arabic SF novel, *Qāhir al-Zaman* (Conqueror of Time) by Nihad Sherif, has been made into an Egyptian film of the same name (<http://www.imdb.com/title/tt0322905/>), which is available to view in full on YouTube in sections, the first posted by Ahmed Faris, 18 June 2012, <http://www.youtube.com/watch?v=O8vgFs4tV4g>. Few Arab SF films have been produced, although Yazan Al-Saadi refers to Ben Robinson and Qatari Sophia al-Maria’s “sci-fi musical comedy” *Topaz Duo: Cosmic Phoenix* (which, they say, Qatar TV found “too weird” to commission as a series), and two Qatari sci-fi films, *The Package* and *Lockdown: Red Moon Escape*. Al-Saadi, “Arabic Science Fiction”. Dr Na’if al-Mutawwa’s popular *The 99* comic-book series, featuring an international cast of heroes exemplifying the virtues of God, has been made into a television series: <http://www.the99.org>. A reception-based study of Western SF film in the Arab world would also be of interest; King Abdullah II of Jordan played a seven-second cameo role in *Star Trek: Voyager* 35, posted by Chris Sétian on 1 February 2010, <http://www.youtube.com/watch?v=Kmut6FJ1d4M>; this is also referenced in referenced at Juan Cole’s article <http://www.juancole.com/2011/08/jordan-plans-green-star-trek-theme-park.html>. See also Abdullah Yayha’s article “A Guide to Arabs, Muslims in Science Fiction” in <http://www.1971-reviewae.com/2011/01/guide-to-arabs-muslims-and-science.html> (accessed 29.2.16), which bemoans the lack of Arab or Muslim characters in Western mainstream SF film.

⁷⁴ Pace Suvin, who does not approve of thematic studies of SF: *Metamorphoses*, p. 70.

⁷⁵ For example, Adam Roberts. *Science Fiction* (London: Routledge, 2006); Patrick Parrinder, *Science Fiction: A Critical Guide* (London and New York: Longman, 1979); James and Mendlesohn, *Cambridge Companion*.

on the authors' privileging of the scientific and rational over the supernatural - the material versus the fantastical - or vice versa.

SF is often called the literature of change,⁷⁶ and one of the aims of this study will be to assess to what extent the production of Arabic SF has followed a similar trajectory to the Western genre, primarily in respect of their response to the social effects of technological change. In the Western canon it is possible to sketch a progress from initial public excitement over the space race and the new technologies it produced following the Second World War, thence to psi-fantasy and the New Wave, then to space opera, and latterly to the use of the genre to explore questions of gender, utopias, space travel, cyberpunk and genetic modification. Will the same evolutionary process be apparent in the Arab genre?

Matti Moosa tells us that Jurji Zaydān wrote about the history of Islam and of Arabic because he wanted the Arab public to be able to read its own history.⁷⁷ If, as Jacquemond has it, Egyptian writers map the conscience of the nation in general, Arabic SF authors may reveal the broad outline of a national or cultural attitude towards technology, concomitant social change, and its imaginary picture of the future Arab world.

⁷⁶ For example, Adam Roberts, *Science Fiction*, p.4; James E. Gunn, *Introduction*, in Gunn and Candelaria, *Speculations*, p. x; Matthew, *Japanese Science Fiction*, p. 2: "Science fiction...is not particularly about science...It is, however, the literature of a society that is aware of science and of the changes it can bring. It is above all the literature of a society conscious of change."

⁷⁷ Matti Moosa, *The Origins of Modern Arabic Fiction (2nd edition)* (Boulder and London: Lynne Rienner, 1997), p. 198.

Chapter 2: Part 1: Theoretical Approaches to Science Fiction

Whenever you talk about SF, you are speaking theoretically. But if you aren't conscious that you have a theory, you can't control it, you can't criticize yourself, you don't have even the possibility of feed-back for self-examination. Therefore, it's better to have an explicit than an implicit theory: your chances of being halfway intelligent are better. But of course 90 percent of all criticism of SF is not much good either.

Darko Suvin, interview with Horst Pukallus, Science Fiction Studies 54, Volume 18, Part 2, July 1991

Fiction is generally understood as the attempt to imagine unimaginable futures. But its deepest subject may in fact be our own historical present.

Fredric Jameson, *Archaeologies of the Future* (London: Verso, 2007) p. 345

2.1.1 The Right Lens

The choice of theoretical lenses for an academic study of Arabic SF resembles a lenticular array, so numerous are the approaches used by theorists of literature, let alone science fiction. Like the magician in Hoffmann's *Princess Brambilla*, whose Indian eyeglasses afforded access to the marvellous,⁷⁸ the critic may select from his conceptual optometrist's box: for example, the magnifying glass of Spivak's subaltern, seeking to enlarge our view of the literature of the oppressed and marginalised; the well-worn steel-rimmed lens of Marxist criticism (the largest in the set, and the most frequently handled); a scattering of multi-coloured lenses labelled 'New Historicism'; the spectacles of feminist critique, free from any tint of rose; a viridian prism for scrutinizing representations of Islam; a clear/clouded varifocal for surveying the Utopian and dystopian other-worlds created by Arab writers, and,

⁷⁸ Tzvetan Todorov, *The Fantastic: A Structural Approach to a Literary Genre* (tr. Richard Howard) (Ithaca, NY: Cornell University Press, 1975), p. 121.

of course, the flawed lens of Orientalism that must be handled with care, especially when held by a Western hand.⁷⁹

Given the relative lack of Arabic SF production, in comparison with the vast output of the West, and the coincidence of the main growth-period of the Western and Soviet genre with public interest in the space race of the 1950s and 1960s, an element of historical or sociological contextualisation with special attention to perceptions of technology and the future seems appropriate for examining SF's position in the Arab literary world. Although the major critics in the Western SF field are self-declared Marxists, and their work will be considered, the broad theoretical approach here will be that of the New Historicists and sociologists of literature, always mindful of Goldmann's caveat concerning the impossibility of complete representation where historical context is concerned.⁸⁰

Behind the hypothesis that a literature can meaningfully be studied in its socio-historical context is a prior underlying assumption that writing occupies a space of power or significance due to its potential as an agent of change. For Lukács, the historical writing of the Enlightenment actively paved the way for revolution and social change because it highlighted the problems of contemporary society.⁸¹ Although, as Goldmann and Macherey⁸² have shown, a novel completely faithful even to the writer's perception of historical materialism is impossible both as a reflection of historical reality and as a creative endeavour, it is reasonable to suggest that a particular literature can reflect some of the sea-changes in its habitat.

As the German-Iraqi environmental engineer and SF writer Achmed Khammas noted in his ground-breaking 2006 essay "The Almost Complete Lack of the Element of Futureness: Science Fiction in Arabic Literature",⁸³ there is an abundance of SF theory and criticism in the West, and, as the genre is currently relatively underdeveloped in the Arab world, unsurprisingly there is a corresponding relative lack of critical scholarship and theoretical

⁷⁹ Edward Said, *Orientalism* (London: Penguin Books, 2003), p. 13.

⁸⁰ Lucien Goldmann, *Towards a Sociology of the Novel* (tr. Alan Sheridan) (London and New York: Tavistock, 1975), p. 159.

⁸¹ Georg Lukács, *The Historical Novel* (tr. Hannah and Stanley Mitchell) (London: Merlin Press, 1962), p. 20.

⁸² "The text is never a mechanical reflection of the ideology that the writer represents": Pierre Macherey, *A Theory of Literary Production* (London and New York: Routledge, 1978), p. 195.

⁸³ Achmed Khammas, *The Almost Complete Lack of the Element of Futureness*, 10.10.2006 (date of composition), published online at <http://www.heise.de/tp/r4/artikel/23/23713/1.html>

debate written in Arabic. While it would be desirable to examine SF written in Arabic from an Arab critical perspective (at least, to avoid the inevitable distorting effect of the Orientalist lens), opportunities at present are few. Given the thriving Western discourse on SF and critical theory, it would be both disingenuous and perverse to ignore the major themes and current developments in the global (in practice, largely British and American) discourse. The themes of the genre are fairly universal, so there is no need to cavil at the appropriateness of mapping Western theory onto an Arab literary phenomenon (albeit one with, as we shall see, Western roots).

2.1.2 Negative Critical Perception of Science Fiction

The popular image of the majority of SF literary output as trite, formulaic, escapist literary trash is commonly lamented by enthusiasts. Gary K Wolfe notes that copies of American SF pulp magazines were used as ship ballast during the war,⁸⁴ and this is often an apt metaphor for the genre's perception in the wider literary world. Philip John Davies quotes Kurt Vonnegut's complaint:

I have been the soreheaded occupant of a file drawer labelled 'science fiction'....and I would like out, particularly since so many serious critics regularly mistake the drawer for a urinal.⁸⁵

While it is ironic that a genre designed to provoke and nurture interest in new inventions should frequently prove lacking in originality, this view can be ascribed mainly to the perception of SF that first arose from the admittedly poor quality of the material produced in mass-publication in pulp magazine form of the 1920s onwards as a response to public interest in developments arising from technologies developed during the World Wars and the space race.

Stableford quotes the view of one early American SF publisher, Harry Bates, the founder of *Astounding Stories*, who described a rival magazine, *Amazing Stories*, as "packed with

⁸⁴ Veronica Hollinger and Joan Gordon, eds., *Edging into the Future: Science Fiction and Contemporary Cultural Transformation* (Philadelphia: University of Pennsylvania Press, 2002), p. 239.

⁸⁵ Philip John Davies, Chapter 1 "Science fiction and conflict" in Philip John Davies, ed., *Science Fiction, Social Conflict and War* (Manchester and New York: Manchester University Press, 1990), p. 2.

puerilities! written by unimaginables! cluttered with trivia!”⁸⁶ While Bates’ motives were clearly suspect, this assessment encapsulates the general view of the genre at the time. It is almost as if there is an assumption that if technology or futurism is the driving force of a text, it somehow loses literary merit, putting romance ahead of rationalisation and valorising the new or strange at the expense of literary quality; that its use of repetitive plot devices, themes and motifs makes it, in the phrase of Gary K Wolfe, a kind of “literary karaoke”.⁸⁷ SF has however become popular in the West, and, even if high turnover in response to high demand has sometimes led to poor quality, it is as unfair to judge SF by its poorest examples as it would be to judge literature in general on the same basis.

Poor literary execution is not SF’s only perceived fault. The genre’s superficial ‘unrealness’ also provokes derision: it is seen as a literature that “lacks the gravity of lived experience”⁸⁸ – a view that dismisses a text’s literary merits purely because of the imaginatively-fabricated nature of its science-fictional elements. Ballard argued that SF’s fantastical setting deprives it of authority – “the more serious it tries to be...the greater its failure, as it completely lacks the moral authority and conviction of a literature won from experience.”⁸⁹ (This opinion is, unfortunately, shared in the Arab world by the most august of its litterateurs, as we shall see in the following chapter.)

SF is therefore more vulnerable than overtly ‘realist’ fiction to the charge of escapism, and to concomitant dismissal on the grounds of triviality. Stableford quotes the American SF writer Robert Silverberg’s boyhood experiences of isolation and alienation as typical of the formative experiences of SF writers, and notes that the genre may be particularly attractive to older children and teenagers because the majority of their lives are still located in the future.⁹⁰ This association of SF with escapist reading ignores the benefits of the restorative function of literature; the detraction may be the result of a semantic association of escape with cowardice. In contradiction of such an assumption, Margaret Hiley noted C.S. Lewis’ record of Tolkein’s comment that those most likely to be preoccupied with criticising the notion of

⁸⁶ Brian M. Stableford, *The Sociology of Science Fiction* (San Bernardino, CA: Borgo Press, 1987), p. 52.

⁸⁷ Hollinger and Gordon, *Edging into the Future*, p. 28.

⁸⁸ Istvan Csicsery-Ronay Jr., *The Seven Beauties of Science Fiction* (Middletown, CT: Wesleyan University Press, 2008), p. 83.

⁸⁹ Ibid.

⁹⁰ Stableford, *Sociology*, pp. 92 - 93; also see Carl Freedman, *Critical Theory and Science Fiction* (Hanover, NH: Wesleyan University Press, 2000), p. 89.

escape are jailers,⁹¹ further observing that “There is usually some (political or cultural agenda) behind the disapproval of fantasy and its being labelled escapist and lowbrow.”⁹²

An attempt to render the charge of ‘escapism’ slightly more sinister and morally harmful can be found in Robert C. Holub’s recounting of Leo Löwenthal’s psycho-sociological study of Dostoyevsky’s reception in 1930s Germany. He found that fiction can be an “ideological crutch”, something that fulfils a psychosocial need for fantasy but also retards social progress, as energy that could be used for change is used up in satisfying the fantasy⁹³ (a view shared by Marx).⁹⁴ Carl Freedman detects a conservative, conspiratorial agenda behind the critical disdain for SF; the marginalisation of the genre actually results from its affinity with Marxism:

...if... science fiction enjoys a unique affinity with Marxism as well as with other varieties of critical theory – then it is virtually self-evident why the literary ruling-class, who ultimately determine questions of canonization, have not wished to elevate the social and ideological status of so subversive a genre.⁹⁵

It is difficult to believe this argument however, as many ‘historical-realist’ texts that pitch a proletariat against a bourgeoisie are an accepted part of the canon.

2.1.3 A New Historicist Approach

“Always historicise!”⁹⁶ Jameson’s opening salvo from *The Political Unconscious*, is the clarion call of the New Historicists, whose theoretical approach gives prominence to speculation on the contextual and social elements surrounding a literature or writer, anchoring it in context but with the flexibility to drift with a current that this metaphor implies.

⁹¹ Margaret Hiley, “Aspects of modernism in the works of C.S. Lewis, J.R.R. Tolkien and Charles Williams” (unpublished PhD thesis, University of Glasgow, 2006), p. 28, quoting Lewis’ essay “On Science Fiction” in *Of Other Worlds* (London: Geoffrey Bles, 1966), p. 67.

⁹² Ibid.

⁹³ Robert C. Holub, *Reception Theory: A critical introduction* (London and New York: Methuen, 1984) pp. 46 - 47.

⁹⁴ “Marx thought Utopian dreaming was a waste of revolutionary energy”: Adam Roberts, *Fredric Jameson* (London and New York: Routledge, 2000) p. 106.

⁹⁵ Freedman, *Critical Theory*, p. 86.

⁹⁶ Fredric Jameson, *The Political Unconscious: Narrative as a Socially Symbolic Act* (Ithaca: Cornell University Press, 1981), Preface, p. 9.

The New Historicist theory of literature, resistant to definition even by its own coalescing theorists Catherine Gallagher and Stephen Greenblatt,⁹⁷ is a highly contextualising and diverse approach to the analysis of the production of literature. Taking inspiration from Herder's insistence on the integration of history and art, it opens up "the possibility of treating all of the written and visual traces of a particular culture as a mutually intelligible network of signs."⁹⁸ It draws the reader to consider unexpected connections between social, historical and cultural reality and literature,⁹⁹ and to draw parallels between diverse aspects of a culture. It is variously critical, interpretive, catholic, anecdotal and very aware of the possible significance of seemingly unconnected factors.

New Historicism's strength is that it relates the text to palpable material realities, in contrast to the ontologically discrete theories that posit the myriad metaphorical electrical currents of the literary world as subject to buzzing blasts of static from a Platonic plane, from the activity of an Hegelian *Zeitgeist* in the social machine, or from vibrations in Teilhard de Chardin's noosphere that signify a prior-active shift in a spiritual rather than a neurological collective unconscious. Its weakness is that the freedom to forge linkages across all of the literature's conceivable social, cultural or historical fields makes this interrogative tool very dependent upon the critic's level of knowledge and awareness of the *milieu* of the literature he is studying.

The risk of bias on the part of the Western critic peering through the Orientalist lens is also ever-present. We must question how to use historical, cultural and social information in the sociological analysis of literature and be aware of the dangers of taking the evidence at face value;¹⁰⁰ an issue also treated seriously by Bourdieu in respect of the difficulty of reconstructing original spaces in philosophy, art or literature.¹⁰¹ While New Historicism offers the critic the freedom to summon diverse cultural, sociological and historical artefacts in support of their hypotheses, a specifically sociological theory of literature offers a

⁹⁷ Catherine Gallagher and Stephen Greenblatt, *Practising New Historicism* (Chicago and London: University of Chicago Press, 2000), p. 1.

⁹⁸ *Ibid.*, p. 7.

⁹⁹ *Ibid.* (the relationship between literature and the role of the potato in Ireland's history), p. 110 - 135.

¹⁰⁰ Mark Robson, *Stephen Greenblatt* (Abingdon: Routledge, 2008), p. 67 on the New Historicist criticism of E. M. W. Tillyard's 1930s study of Elizabethan literature.

¹⁰¹ Pierre Bourdieu, *The Field of Cultural Production Essays on Art and Literature* (edited and introduced by Randal Johnson). (Cambridge: Polity Press, 1993), pp. 31 - 32.

narrower and more precise approach to a text, by considering its function as a social artefact itself.

2.1.4 Reception Theory

Jauss' seminal work *Toward an Aesthetic of Reception* borrows Gadamer's 'fusion of expectation', introducing the paradigm of the 'horizon of expectations', a collection of the reader's experiences and expectations that ideally locate the text diachronically and synchronically in literary history as a valid sub-set of general history. For Jauss, "The historical life of a literary work is unthinkable without the active participation of its addressees",¹⁰² and

The social function of literature manifests itself in its genuine possibility only where the literary experience of the reader enters into the horizon of expectations of his lived praxis, performs his understanding of the world, and thereby also has an effect on his social behaviour.¹⁰³

This idea of literature as historical actor and agent of social change not only frames literature positively as a stimulant rather than mere opiate or restorative; it positively militates against Löwenthal's charge that it causes social apathy by sublimating the energy of the reader in fantasy. It invests literature with permeating, transformative power, as opposed to the relatively superficial cleansing or refreshing effect of a psychological rinsing granted to it by a purely restorative functional perspective.

2.1.5 The Sociology of Science Fiction

In her theoretical study of literary worlds, Ruth Ronen writes that "A fictional world can be described as a unique system separate from, although dependent on [the] cultural-historical reality in which it is created and with which it holds more or less obvious affinities."¹⁰⁴ This dependency of the fictional world upon its cultural-historical context is explored by SF author

¹⁰² Hans Robert Jauss, *Toward an Aesthetic of Reception*, tr. Timothy Bahti (Minneapolis: University of Minnesota: 1982), p. 19.

¹⁰³ Ibid., pp. 39 - 40.

¹⁰⁴ Ruth Ronen, *Possible Worlds in Literary Theory* (Cambridge: Cambridge University Press, 1994), Introduction, p. 15.

and critic Brian M. Stableford, whose *The Sociology of Science Fiction* examines the value of a sociological approach to literature as specifically applied to SF. Tackling the most common criticism of the genre first, Stableford sets out the core of his argument; rather than dismissing SF as worthless escapism, he suggests that fiction that speculates about science and alternative future societies can tell us about the social environment of the writer and the readership as well as, or better than, contemporary realist literature.¹⁰⁵

Following Lucien Goldmann, for whom the ‘exceptional individual’ was capable of crystallizing the social world in literary form, and Taine’s identification of social factors (*race, milieu, moment*) as the *fons et origo* of literary creativity,¹⁰⁶ and declaring the supremacy of social context in literary criticism, Stableford firstly examines the social functions and effects of literature generally. He pays particular attention to Gerhardt Wiebe’s explanation of the functions of Directive, Maintenance and Restorative messages in broadcasting, the emphasis being on the last, the purpose of which is recreational and healing (analogous to Hugh Dalziel Duncan’s Instrumental, Reinforcement and Respite functions in literature.)¹⁰⁷ He cites Hugo Gernsback, the publisher of early 1920s American pulp SF, as a proponent of the ‘directive’ function of SF, which deliberately used decorative narrative as a sugar coating with which to make ‘real’ science palatable.¹⁰⁸

There is a sense in which all fictional literature is offered as a *vade mecum* in the company of that particular author and genre for a particular purpose: crime fiction offers an intellectual exercise for armchair detectives, supernatural tales a caution to the superstitious or an exploration of the occult for the curious, and SF explorations of questions about the future, technology or alternative societies. For SF readers, although they may reasonably expect to be entertained by the novelty and fantastical elements, a greater emphasis on the Directive or Instrumental functions may be expected, because of the interest in the future and technology that draws them towards this genre rather than to ‘pure’ fantasy.

The remainder of Stableford’s study explores the history of the genre (during which he strips down the evolutionary origins of published SF to an unromantic quartet of transport,

¹⁰⁵ Stableford, *Sociology*, Introduction, p. 7.

¹⁰⁶ Ibid., p. 13.

¹⁰⁷ Ibid., pp. 22 - 23.

¹⁰⁸ Ibid., p. 48.

evolution, socialism and war)¹⁰⁹ and its reception, considering the social realities behind the popular SF motifs of machines, aliens, social critiques and supermen.

We do not have to agree that the exterior world is more powerful an influence on the text than a writer's individual interiorized experience of that world. We as critics have access only to the shared exterior, and can only speculate about the writer's interior interpretation of this world (this may be true even with the benefit of their direct unmediated commentary). However, although for this reason it may seem easier to attempt to locate the text in relation to prevailing social conditions than to second-guess authorial intention, such an approach risks valorising the question of how and why 'society' produces literature above the question of how and why a particular author produces society in his literature, when both are of equal interest. The latter element is expandable, as one can then examine how many authors writing in the same genre produce society in their literature, then analyse the results for similarities and significant corollaries contributing to a credible hypothesis. A third perspective would examine how the social comment of a text is actually understood by its audience.

Balancing a triangulation of these approaches – what we think the text is saying about society, what we think the author thinks he is saying about society, and what the readers think the author is saying about society – is crucial to understanding the relation of text and society as wholly as possible.

In summary, the sociology of literature is a two-way mirror: the writer may, however imperfectly, try to reflect his perceived external social reality in his work, but his perception will inevitably respond and adapt to the prevailing social environment and possibly also commercially to readership preference. A popular writer or genre reveals something about the society that approves it *en masse*. The work of the sociologist of literature is to identify those traits in a given corpus that appear to him to reflect a certain social reality, evaluate whether or not the writer consciously intended them to act as representations, and theorise the social factors that may explain the popularity of a particular literary genre.

¹⁰⁹ Ibid., p. 46.

2.1.6 The Sociology of Literary Taste

The phenomenon of literary fashions, taste and canon formation also merits consideration as part of a sociologically-oriented study. Holub quotes Levin L. Schücking in support of this idea: “What was read at a specific time in various strata of the nation and why it was read – this should be the chief question of literary history.”¹¹⁰ The sociology of literary taste is an important part of an enquiry into the reasons why some literatures flourish in certain societies and others do not.

In his 1945 study *The Sociology of Literary Taste* Levin L. Schücking opens his argument boldly, doing away with notions of vague spiritual stirrings as the driver of literary popularity by stating that “there is no such thing as a spirit of the age”.¹¹¹ He then examines the factors that, in his view, really influenced the popularity of particular works or authors at a given time, noting the effects of personal recommendation,¹¹² the factor of available time¹¹³ and the role of school and university curricula in preserving the canon and taste-formation.¹¹⁴ The Egyptian-American SF critic Sifāt Salāmāh, whose views were quoted in Chapter 1, called for the integration of SF into Arab school and university curricula for this very reason.¹¹⁵

Schücking also observes the importance of the publishing industry: “The spread of taste in regard to works of art may be determined not only by the conflict of ideas but by a competition of very concrete elements of power.”¹¹⁶ In the Arab world, the high cost of books that arguably constitutes a knowledge tax, a samizdat publishing ethos, relative lack of copyright enforcement and other factors of book production make it necessary to differentiate between how we evaluate the book market and its effect on the formation of taste in Arab countries, and how we would approach the same exercise in the highly-commercialised, demand-driven, advertisement-saturated and metric-monitored book market in the West.

¹¹⁰ Holub, *Reception Theory*, p. 50, also mentioning in the footnote that this phrase was quoted by Jauss in his “Provocation” essay.

¹¹¹ Levin L. Schücking, *The Sociology of Literary Taste*, (London: Kegan Paul Trench Trubner and Co., 1945), p. 7.

¹¹² Ibid., p. 35.

¹¹³ Ibid., p. 65.

¹¹⁴ Ibid., p. 68.

¹¹⁵ ... ضرورة مستقبلية و ليس ترفا in *Al-Sharq al-Awsat* No. 9683, 2 June 2005.

¹¹⁶ Schücking, *Sociology of Literary Taste*, p. 45.

The author's consciousness of public taste and his willingness to adapt, cater or pander to it is also key: Schücking quotes Arnold Bennett's warning against the arrogance of the *petit maitre* who scorns public opinion.¹¹⁷ Historically of course popular literary production has arisen out of various motivating factors, such as economic necessity,¹¹⁸ or the wish of the author to write books that they would wish to read,¹¹⁹ or, as in the case of Egyptian SF writer Nabil Farouk, the prospect of winning a magazine competition.¹²⁰

The sociology of taste is an examination both of random events that result in the popularity of a particular text or genre (though Schücking acknowledged that even apparently spontaneous public popularity or notoriety can be the result of manipulation by an author anxious for recognition),¹²¹ and of the academic, social, cultural and commercial factors that help to promote it.

2.1.7 Science Fiction and Marxist Criticism

Marxist criticism is an obvious prism through which to view SF, as it is a literature powerfully concerned with social as well as technological change. For example, the plot of a technologically disenfranchised proletariat plotting revolution against a technologically-privileged bourgeoisie presents a natural source of conflict for the SF writer. Following Lukács, with his view of the ideal literature as a mirror of social reality and agent of change,¹²² the Marxist critics replace the Hegelian idea of the *Zeitgeist* with the force of a "collective consciousness based on social class",¹²³ and it is through this lens of this class consciousness that they scrutinise SF texts.

The most prominent Western theorists of SF are an avowedly Marxist troika of Darko Suvin, Carl Freedman, and Fredric Jameson. Freedman is proud to acknowledge his debt to Lukács:

¹¹⁷ Ibid., p. 37.

¹¹⁸ For example, the American SF writer Robert Heinlein: see <http://www.heinleinsociety.org/rah/works/novels/redplanetbluepencil.html>, accessed 29.2.16.

¹¹⁹ For example, C. S. Lewis, *Of Other Worlds* (London: Geoffrey Bles, 1966), p. 22.

¹²⁰ Farouk launched his popular *Milaff Al-Mustaqbal* (Future Files) series in 1984 by winning a competition run by the Kuwaiti magazine *عالم الكتب* (Khammas, *Almost Complete Lack*).

¹²¹ See Schücking, *Sociology of Literary Taste*, p. 45 for the examples of Cervantes and Smollett.

¹²² Lukács, *Historical Novel*, p. 20.

¹²³ Stableford, *Sociology*, p. 11.

Science fiction and the novel of historical realism both involve a Lukácsian dialectic of historical identity and historical difference, and are both produced from much the same historical matrix.¹²⁴

He posits a strong natural affinity between critical theory and SF, as

science fiction is of all forms of fiction today the one that bears the deepest and most interesting affinity with the rigors of dialectical thinking”, and notes its insistence upon “historical mutability, material reducibility and utopian possibility”.¹²⁵

Jameson’s *Archaeologies of the Future* is a meditation on the history of Utopia as “an imaginary enclave within a real social space”:¹²⁶ a place to deconstruct social possibilities through allegory. He seeks to separate SF from fantasy for reasons of respectability (though acknowledging that any kudos attributed to the genre by reason of its science content may be suspect):

Whether legitimately or not, the scientific pretensions of SF lend the Utopian genre an epistemological gravity that any kinship with generic fantasy is bound to undermine and seriously to unravel; associations with Plato or Marx are more dignified credentials for the Utopian text than fantastic trips to the moon in Lucian or Cyrano.¹²⁷

Such judgment surely has little to do with the criticism of SF from class-conscious historical-materialist point of view, and can rather be considered closer to literary snobbery; fantastical Utopias or dystopias such as those of More, Butler and Morris need no scientific costume to confer literary ‘gravity’. Perhaps he is referring to seriousness of purpose, but this denies ‘gravity’ to works that may appear comical or frivolous but have satirical power.

Mark Robson observes that, for Jameson, Marxism divides the world, but for poststructuralist Jean-Francois Lyotard, it actually homogenises it, demonstrating that capitalism’s effects can

¹²⁴ Freedman, *Critical Theory*, Preface, p. xv and p. 50.

¹²⁵ Ibid., Preface, p. xvi.

¹²⁶ Jameson, *Archaeologies*, p.18.

¹²⁷ Ibid., p. 57.

be contradictory.¹²⁸ While a traditional Marxist reading of Arabic SF might reveal Arab proletariat anger at Western technological domination, a poststructuralist reading might alternatively emphasise the implications of the extent to which Arab SF writers have internalised the Western SF literature and its themes so that Arabic SF becomes very similar to the Western genre.

The advantage of the homogenisation effect predicted by the poststructuralist view is that this would create a horizon of expectations in the Arabic literature that will be recognisable to those familiar with the Western canon. The negative aspect is that Arabic SF then runs the risk of becoming what Wolfe called “literary karaoke”¹²⁹ if it becomes so similar to the Western output that it does not also clearly self-identify as part of ‘Arab’ literature.

The Jamesonian reading may be bleak in that the relative lack of Arabic SF can be read as signifying a daunting gap in technological progress and the discouraging of heuristic thinking within authoritarian societies, but nonetheless the suitability of this traditional Marxist perspective as an analytical tool for a literature concerned with change, created within a hierarchical, class-divided society, cannot be disputed.

2.1.8 The Sociology of Arabic Science Fiction

Having established the focus on literature as a reflection, however blurred or incomplete, of the contemporary society of the writer, questions about the genre in Arabic can be explored. We must now try to find a place for Arabic SF in relation to other modern Arabic literature.

The status of SF as a minority literature within the contemporary Arabic corpus, has, arguably, socio-historical resonance: Reuven Snir in his 2000 article “The emergence of science fiction in Arabic literature”,¹³⁰ one of the very few academic articles written with a specific focus on Arabic SF, offers the ‘system-theory’ of Niklas Luhman, which argues the particular importance of literature on the centre-periphery, as a theoretical underpinning for a study of the significance of this minority literature.

¹²⁸ Robson, *Stephen Greenblatt*, p. 30.

¹²⁹ Hollinger and Gordon, *Edging into the Future*, p. 28.

¹³⁰ Reuven Snir, “The emergence of science fiction in Arabic literature”, *Der Islam*, vol. 77, no. ii, pp. 263 - 285.

Certain types of popular fiction are generally susceptible to classification among the lowest of Bourdieu's three legitimacies of literature (peer-respected; bourgeois/academic and demotic);¹³¹ part of literature's large-scale, low-brow (as opposed to restricted, high-brow) production. With regard to Arabic fiction, Richard Jacquemond argues that the very existence of a low-brow literature is necessary in order to throw the merits of high or artistic literature into relief. He suggests that the development of the literature market in Egypt mirrors that of France a hundred years earlier, and that criticism of Arabic popular literature remains polarized between a concern with folklore and the oral tradition, and the study of 'high' literature, ignoring the vast body of what he calls the 'para-literature' of the mass market in between, including detective, comic, fantasy and science fiction.¹³²

Sabry Hafez's *The Genesis of Modern Arabic Discourse*, a study of the development of the short story across the Arab world, follows Goldmann, Bakhtin, Watt and Leavis on the sociology of narrative, and Jauss on genre. Hafez declares his belief in the possibility of charting literary genealogy and sociological influence simultaneously. The generation of a new Arabic narrative discourse is "inseparable from the emergence of the new social and cultural experiences which gave rise to a new perception of national identity",¹³³ and the relationship between modern Arabic and Western narrative discourse (and also that between modern Arabic discourse and classical Arabic fiction) is not mere borrowing or copying, but one of "dynamic intertextuality".¹³⁴ This sociological approach to the development of the short story can also be applied to the consideration of the socio-cultural reasons why SF has not flourished in the Arab world. Four obvious reasons may be suggested as to why this is so.

Firstly, there are underlying factors in the Arab world that restrict reading as a hobby in general. The most obvious are an historically low literacy rate and inability to afford books, but Hafez also points to the contrast between the social expectations in respect of the use of time in the Arab world and "the lonely art of reading."¹³⁵ Increased availability of time for reading can be negatively perceived as symptomatic of an undesirable atomisation of society.

¹³¹ Bourdieu, *Field of Cultural Production*, p. 51.

¹³² Richard Jacquemond, *Conscience of the Nation: Writers, State and Society in Modern Egypt* (tr. David Tresilian) (Cairo and New York: The American University in Cairo Press, 2008), p. 156.

¹³³ Sabry Hafez, *The Genesis of Arabic Narrative Discourse* (London: Saqi Books, 1993), p. 22.

¹³⁴ Ibid., p. 27.

¹³⁵ Ibid., p. 12.

Secondly, there is a potential stigma attached to SF because it is an imported genre. If we map Hafez's caution about the arrival of the short story onto SF, we can see that this may be partly it is entering a host culture dominated by a different faith,¹³⁶ and also (quoting Said) because in general Arab authors have had to struggle in order to innovate.¹³⁷ In the Arabic critical literature discussed in the next chapter, several writers consciously seek to draw a thread of continuity between the fantastical heritage of the *Thousand and One Nights* and modern Arabic SF. There is a clear wish to imply that SF is not entirely a Western import, that it has an identifiably Arab pedigree.

Thirdly, the 'unreal' aspect of the genre was at odds with the heavy literary emphasis on realism in response to modernity apparent in the early modern Arab novel. Mohammed Siddiq, in his recent study *Arab Culture and the Novel: Genre, Identity and Agency in Egyptian fiction*, noting the Arab novel's heavy reliance on mimesis, argues that "...this 'servile', mimetic panting after the 'real' prevents the novel from getting out of touch or out of step with Arab reality and consciousness". As a result of this concentration on realism, he notes that there is a near-total absence of less mimetic modes of narration such as detective novels, utopias, and science fiction.¹³⁸ Kendall and Jacquemond, while discussing the effect of the 1967 defeat on the Egyptian literary scene, find that it particularly affected the dominance of social realism in the novels of this period.¹³⁹

Fourthly, the lack of encouragement of a heuristic learning culture in an authoritarian society and the perception of advanced technology as imported and importable may cause Arab readers to ascribe little value to a literature whose development is contingent upon modernity and the arrival of technology. However, this view presupposes that lack of scientific advancement in a society indicates a lack of general public interest in technology and the future, whereas both may in fact be due to other external factors such as a lack of priority in government spending, or the spending power of the average family. In the literary world, Badawi found a tendency towards enthusiastic description of scientific developments in the

¹³⁶ Ibid., p. 20.

¹³⁷ Ibid., p. 22.

¹³⁸ Mohammed Siddiq, *Arab Culture and the Novel: Genre, Identity and Agency in Egyptian fiction* (London and New York: Routledge, 2007), p. 156.

¹³⁹ Elisabeth Kendall, *Literature, Journalism and the Avant-Garde* (London and New York: Routledge, 2006), pp. 117 – 118, quoting journalists who believed that this was the case; for Kendall, "...this is not the whole picture. The new literary sensibility was not the exclusive property of the young generation and it was more than a spontaneous response to the defeat." Jacquemond, *Conscience*, pp. 91 – 92, presents the defeat as more of a watershed moment, giving rise to greater questioning of the realist paradigm.

Wasf neo-classical poetry of al-Shawqi and others,¹⁴⁰ so it appears that even during the early stages of the advent of scientific modernity, authors and readers were interested in and keen to play with these concepts.

In an interview in October 2010, Achmed Khammas bemoaned the continuing lack of scientific thinking and actual scientific innovation in the Arab world, despairingly noting its huge dependence on imported technology.¹⁴¹ Although there are signs of a scientific renaissance in the Arab world, such as the 2009 opening of KAUST, the King Abdullah University for Science and Technology in Saudi Arabia, the previous relative lack of investment has meant that Arabic SF writers are effectively mapping their creative work onto a space that has been inactive or void within their recent history.

A simple yet thoughtful commentary on the problem of defining SF is given by the Syrian literary critic Muḥammad ‘Azzām in his 1994 study *Al Khayāl al-‘Ilmi fī al-Adab* (Science Fiction in Literature):-

Science fiction is a kind of compromise between literature and science, or at least a joining and reconciliation between them. In the first stage, scientists inspire writers, then they surpass them, and become writers themselves, and in the next stage, they eagerly pursue scientists’ discoveries and inventions.

The writer uses science as inspiration for his literary imagination, soaring above the horizons of the future, his motivation being the ambition to explain obscure phenomena in nature, or in the human soul, and the promotion of myths which are a kind of science fiction literature, producing the necessary familiarisation of the young with scientific thinking that directs their education towards creating the reality.¹⁴²

إن (أدب الخيال العلمي) هو نوع من المصالحة بين الأدب و العلم، أو على الأقل الجمع و التوفيق بينهما. وفي مرحلة أولى استلهم العلماء الأدباء، ثم تجاوزوهم، فأصبح الأدباء، في مرحلة تالية، يلهثون وراء

¹⁴⁰ M. M. Badawi (ed.), *The Cambridge History of Arabic Literature: Modern Arabic Literature* (Cambridge: Cambridge University Press, 1992), p. 56.

¹⁴¹ <http://islamscifi.com/islam-scifi-interview-of-achmed-khammas/>. Accessed 29.2.16

¹⁴² Muḥammad ‘Azzām, *Al-Khayāl al-‘Ilmi fī al-Adab* (Damascus: Dār Ṭalās lil-Dirāsāt wa al-Tarjama wa al-Nashr, 1994), p. 9.

فالكاتب يستخدم (العلم) منطلقاً بخياله الأدبي، يخلق في آفاق مستقبلية، يدفعه الطموح إلى تفسير الظواهر الغامضة في الطبيعة، أو في النفس البشرية، و من هنا نشأت الأساطير التي هي نوع من أدب الخيال، و ولدت ضرورة تعويد النشء على التفكير العلمي الذي يحوّل الناشء إلى مبدع حقيقي.

Lastly, many literatures show a tendency to look backwards rather than to the future, to adopt the easy, clichéd nostalgia of Golden Age literature. Matti Moosa speaks of a deliberate valorising of the Pharaonic past in contrast to the lack of creative expression about the future,¹⁴³ a phenomenon that will be examined in Chapters 4.2 and 5.

2.1.9 Conclusion

Science Fiction is a late blooming in Arabic literature, a sparse flowering of fantastical futurism transplanted into a rich subsoil of twentieth century Arabic literature. As an alien grafting, it has not to date enjoyed a congenial reception, though there have been recent stirrings of interest suggesting that the next few years may witness a fresh efflorescence.

The sociological approach that seeks to contextualise Arabic SF within its host literature and society is unlikely to demonstrate adamant links of causality between social (epi)phenomena and the texts, at least not without abuse of New Historicist methods. Rather, it can help us to examine the texts not only as discrete literary artefacts, products of the author's imagination designed to entertain, but as indicators of the author's and readers' views of and concerns about the society within which they were composed. The approach is designed to generate a plausible collection of hypotheses for discussion, based on the interrelations observed between text and host society.

As a maritime map-maker cannot disregard the shoals and shelves beneath his boat as he attempts to chart the currents, neither can the literary critic navigating the relatively unexplored waters of Arabic SF ignore the topographical features of the social sea-bed. Even if these new channels are being carved by a current flowing from a Western ocean, it is this historical Arab bed-rock that is being shaped anew, and which in turn shapes and influences

¹⁴³ Matti Moosa, *The Origins of Modern Arabic Fiction (Second edition)* (Boulder and London: Lynne Rienner, 1997), p. 308.

the environment into which those foreign currents flow. It is to this tidal zone of continuous reciprocity that our study brings a critical sonar to explore its hidden world.

Chapter 2.2: Part 2: Literature Review

2.2.1 Introduction

Science fiction is a relatively recent addition to the Arabic literary canon, and therefore the critical corpus is also in its early stages. This chapter will review this small number of books, theses, academic and media articles that deal specifically with modern Arabic SF, or articles in Arabic that indicate the first critical awareness of science fiction in the Arab world.

It is generally agreed that the first Arabic SF texts appeared in the 1950s.¹⁴⁴ The first critical work appeared in *Fuṣūl* in 1982,¹⁴⁵ followed by another article in the same journal in 1984.¹⁴⁶ In 1988, the first of several doctoral theses on Arabic science fiction appeared in Egypt, 'Azza Ghānim's "Artistic Creativity in Science Fiction Stories",¹⁴⁷ and in the following year the first full-length book was published in Damascus, by the prolific Syrian author and astronomer Talib Omran.¹⁴⁸ 'Omran's work was the subject of a 2000 study by the Syrian Muḥammad 'Azzām,¹⁴⁹ who also wrote his own history of Arabic SF published in Damascus in 1994.¹⁵⁰ In 1999, Mahā Maḥlūm Khaḍr submitted her doctoral thesis at Cairo University, a study of various Egyptian authors based upon Gerard Genette's theory of narratology,¹⁵¹ followed in 2000 by former Egyptian Culture Minister Yusuf Al-Sharuni's full-length study *Al-Khayāl al-'Ilmī fī Al-Adab Al-'Arabī Al-Mu'āsir* (Science Fiction in Contemporary Arabic Literature).¹⁵² Maḥmūd Qāsim contributed a postscript to this work, following his own publication of *Al-Khayāl al-'Ilmī: Adab Al-Qurn Al-'Ashrīn* (Science Fiction: Literature of the Twentieth Century) in 2006.¹⁵³

¹⁴⁴ Achmed Khammas, "The Almost Complete Lack of the Element of 'Futureness,'" tr. Don Mac Coitir. <http://www.heise.de/tp/artikel/23/23713/1.html>, accessed 29.2.16; Kawthar Ayed, "Science-fiction Arabe," *Solaris*, no. 164: p. 165. <http://www.revue.solaris.com/numero/2007/solaris-164i.pdf>, p. 25, accessed 29.2.16; Muḥammad 'Azzām, *Al-Khayāl al-'Ilmī fī al-Adab* (Damascus: Dār Ṭalās lil-Dirāsāt wa al-Tarjama wa al-Nashr, 1994), p. 68, and Yusuf Al-Sharuni, *Al-Khayāl al-'Ilmī fī Al-Adab Al-'Arabī Al-Mu'āsir* (Cairo: General Egyptian Book Organisation, 2000), p. 67, p. 101.

¹⁴⁵ 'Iṣām Bāhī, "Ruwayā al-Khayāl al-'Ilmī wa Ru'an al-Mustaqbal." *Fuṣūl* vol. 2.2 (January to March 1982): pp. 57 - 65.

¹⁴⁶ Medhat Djayar, "Mushkila Al-Ḥadātha fī Ruwayāt al-Khayāl Al-'Ilmī." *Fuṣūl*, vol. 4 (September 1984).

¹⁴⁷ 'Azza Ghānim, *Al-Ibdā' al-fannī fī Qiṣaṣ al-Khiyāl al-'Ilmī*. PhD Dissertation, University of Ain Shams, Cairo, 1988.

¹⁴⁸ Talib Omran, *Fī Al-'Ilm wa al-Khiyāl al-'Ilmī* (Damascus: 1989).

¹⁴⁹ Muḥammad 'Azzām, *Ṭalīb 'Omran: Khayāl bila Ḥudūd* (Damascus: Dar Al-Fikr, 2000).

¹⁵⁰ 'Azzām, *Al-Khayāl al-'Ilmī fī al-Adab*.

¹⁵¹ Mahā Maḥlūm Khaḍr, "Binā' Ruwayāt al-Khayāl al-'Ilmī fī al-Adab al-Miṣrī al Mu'āṣir." PhD Dissertation, Cairo University, 1999.

¹⁵² Al-Sharuni, *Al-Khayāl al-'Ilmī*.

¹⁵³ Maḥmūd Qāsim, *Al-Khayāl al-'Ilmī: Adab Al-Qurn Al-'Ashrīn*, (Cairo: General Egyptian Book Organisation, 2006).

The first European-language doctoral thesis, “*La littérature d’anticipation dystopique et l’expression de la crise dans le monde occidental et arabe*”, was published in France in 2008 by the Tunisian Kawthar Ayed,¹⁵⁴ with extracts published in *Géante Rouge* magazine (edition 15, Summer 2009, p. 30), which was issued during the 2009 French Science Fiction conference in Bellaing, France, together with a short commentary by Tunisian critic Hechmi Khalladi.

Two further doctoral theses have since been published: Gary M. Boutz’s “Generic Clues and Generic Features in Arabic Science Fiction: The Novels of Kassem Kassem” at Georgetown University, and ‘Isām Asāqilah’s “Character Construction in Arabic Science Fiction Novels” (*Binā’ al-shakhsīyāt fī ruwāyāt al-khayāl al-‘ilmī fī al-adab al-‘Arabī*).¹⁵⁵ Asāqilah is also the author of an earlier publication, *Walādat Adab al-Khayāl al-‘Ilmi fī al-Adab al-‘Arabī*. The first European-language book on Arabic science fiction, *La fantascienza nella letteratura araba*, was published in Rome 2013 by Ada Barbaro.¹⁵⁶

Academic articles began to appear again fourteen years after the *Fusūl* pioneers, with a 1998 article by Michael Cooperson on time travel in Arabic literature,¹⁵⁷ and Reuven Snir’s “The Emergence of Science Fiction in Arabic Literature” in 2000.¹⁵⁸ In 2003, *Al-Arabi* magazine published a short article by Jalal Shawqi and Ahmed Abu Zayd on “Science Fiction and the Future of Human Consciousness”,¹⁵⁹ although this mentions only Western SF authors and is mainly concerned with the potential of certain technological developments prefigured in Western SF. In 2006, Iraqi-German engineer Achmed Khammas’ seminal essay “The Almost Complete Lack of the Element of ‘Futureness’”¹⁶⁰ was published in a German newspaper and has become a pivotal point in the development of awareness of Arabic science fiction, while in 2012, SF critic Istvan Csicsery-Ronay Jr. wrote an article in *Science Fiction*

¹⁵⁴ Kawthar Ayed, “La Littérature d’anticipation dystopique et l’expression de la crise dans le monde occidental et arabe.” PhD Dissertation, Université de Provence, 2008.

¹⁵⁵ ‘Isām ‘Asāqilah, *Binā’ al-shakhsīyāt fī ruwāyāt al-khiyāl al-‘ilmī fī al-adab al-‘Arabī*. (Amman, Azminah, 2011).

¹⁵⁶ Ada Barbaro, *La fantascienza nella letteratura araba* (Roma, Carocci Editore, 2013).

¹⁵⁷ Michael Cooperson, “Remembering the future: Arabic time-travel literature.” *Edebiyat*, vol. 8, no. ii (1998): pp. 171 - 189.

¹⁵⁸ Reuven Snir, “The emergence of science fiction in Arabic literature.” *Der Islam*, vol. 77, no. ii (2000): pp. 263 - 285.

¹⁵⁹ Jalal Shawqi and Ahmed Abu Zayd, “Al-Khayāl al-‘Ilmi wa Mustaqbal al-wa’y al-insānī.” *Al-Arabi* magazine (October 2003): pp. 30 - 33.

¹⁶⁰ Khammas, “Almost Complete Lack”.

Studies querying the cultural specificity of the genre in the countries of the developing world, including the Arab world.¹⁶¹

2.2.2 Achmed Khammas

Khammas' 2006 essay "The Almost Complete Lack of the Element of Futureness: Science Fiction in Arabic Literature" is the most concise introductory overview of Arabic SF. Khammas begins with the questions raised during the first Arab language symposium on science fiction in Arabic, held at the University of Casablanca in April 2006, establishing that there was a relative lack of material and interest in SF and futuristic literature in the Arab world in comparison with the West, and positing his own suggestions as to why this might be the case, together with a brief introduction to the major authors and a starter bibliography.

Khammas posits a link between the lack of Arabic science fiction and a corresponding lack of scientific inquisitiveness generally in the Arab world, although he also identifies religion as a limiting factor, citing future prediction and creative power, being the domain of God alone, as the two offending elements, and the authoritarian structures of Arab society. Nonetheless he still confesses puzzlement at the small output, given that "neither Arabic writers nor their readers have any fundamental problems with phantasy per se",¹⁶² given the popularity of the *Thousand and One Nights*. He openly mocks what he constructs as the typical Arab's unquestioning and fatalistic acceptance of foreign technology and willingness to import rather than innovate, quoting the popular Egyptian SF writer Mohammed Al-'Ashrī:-

The failure of SF to take hold in Arabic literature lies in the scientific backwardness of our life. (...) Most new technological terms appear strange and difficult to us, so that we hardly use them.¹⁶³

Having set out a provocative position highly critical of the knowledge culture in the Arab world, he provides a short historical account of published SF works by Arab writers, introducing us to the giants of the genre, Syria's Talib Omran, the Egyptians Nihad Sherif, Nabil Farouk and Muḥammed Al-'Ashrī, as well as a representative selection of other

¹⁶¹ Istvan Csicsery-Ronay, Jr., "What Do We Mean When We Say "Global Science Fiction"? Reflections on a New Nexus," *Science Fiction Studies*, Vol. 39 (2012).

¹⁶² Khammas, "The Almost Complete Lack."

¹⁶³ Ibid.

writers. Omran, whom Khammas calls a ‘pioneer’ of the genre, and whom he indirectly praises for his output and his commitment to the ‘science’ part of science fiction, is the author of one of the earliest book-length critical SF studies.

2.2.3 Book-length studies

The earliest full-length study of Arabic science fiction, Omran’s *Fī al-‘Ilm wa al-Khiyāl al-‘Ilmī* (On Science and Science Fiction),¹⁶⁴ was a 1989 Syrian Ministry of Culture publication of which the first two-thirds is taken up with a basic account of the natural world and speculations on alien life, before SF is introduced. The author, a popular science broadcaster in Syria, discusses a variety of animals, astronomy and rational explanations for the effects of magic mushrooms and the UFO sightings at La Marmora and Broadhaven, before beginning a rather downbeat assessment of the state of Arabic science fiction, saying that “Arab countries are poor in this literature”.¹⁶⁵ He divides SF into two types; texts that assist human development, which, he says, is apparent in science fiction from socialist countries, and ‘Superman’ fantasies which he denigrates as damaging to youth, and which he alleges are fostered by Zionism.¹⁶⁶ Arabic SF output is also split into two camps, those authors whom he says run away on flights of fancy, such as Moustafa Mahmoud and Anis Mansour, and those who deal with “meaningful human matters”, with particular praise reserved for Nihad Sherif.¹⁶⁷ He provides plot summaries of Tolstoy’s *Aelita* and H. G. Wells’ *The Time Machine*, with a brief discussion of how the revolutionary story of *Aelita* mirrored the Russian revolution of October 1917, and the social influence exerted by Wells’ baleful view of scientific development on human progress.

Only the sixth of his seven chapters deals with Arabic SF (the seventh tackles SF in Soviet and American cinema).¹⁶⁸ Omran has a high regard for Sherif’s “elegant literary style”, but beyond telling us that his novels revolve around human struggles in the future between powers from other planets, or on earth against illness, death and old age, there is very little analysis, only plot reiteration, sometimes in great detail.¹⁶⁹ This is an unfortunate and marked characteristic of Arabic criticism of the genre. The few pages that conclude this

¹⁶⁴ Talib Omran, *Fī al-‘Ilm wa al-Khiyāl al-‘Ilmī* (Damascus: Ministry of Culture, 1989).

¹⁶⁵ Ibid, p. 103.

¹⁶⁶ Ibid. This is likely to be an attack on Superman’s American Jewish creators, Jerry Siegel and Joe Shuster.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid, Part 7. Omran discusses *2001: A Space Odyssey*, *Logan’s Run*, *Solaris* and *Sannikov Land*.

¹⁶⁹ Ibid, pp. 121 - 124.

chapter are critical of what he sees as Mahmoud's dismissal of science in *Al-Khurūj min al-tābūt* (Rising from the Coffin) and his misunderstanding of the theory of relativity in *Rajul taht al-Ṣifr* (Man Below Zero), and of Mansour's von Daniken-inspired association of the pyramids with alien technology.¹⁷⁰ It seems likely that either the publisher's brief, or the author's preference, was to produce an introduction to the natural world and space travel pitched at the level of an older child's encyclopaedia, followed by a short study of SF works favoured by the author with only eleven pages of material on the Arab authors, of which the majority are descriptive rather than discursive. Although at the time of writing Mansour and Mahmoud would have been the most popular and well-known authors, writing in 1989, Omran could also have included Towfīq al-Hakīm or Ṣabrī Mūsa, or expanded his analysis of Sherif, Mansour and Mahmoud's work.

Muḥammed 'Azzām's 1994 study *Al-Khayāl Al-'Ilmī fī al-Adab* is an ambitious, well-informed, but sometimes overly descriptive, worldwide history of the genre. He traces its origins to ancient stories of Djinn and Ifrit, "the poetic ancestors" of science fiction;¹⁷¹ the persistent theme throughout is that of the 'dreams' of these old stories being made real by modern science, and his motto is Baudelaire's "fiction paves the way for reality".¹⁷² He seems to view the genre primarily as kind of compromise between science and literature, as well as a practical tool for familiarising the young with the concept of scientific invention.

'Azzām's study begins with a detailed excursus on the supernatural phenomena found in the *Thousand and One Nights*, with particular attention to the exploits of Sindbad, although he admits that the tales are fantastical (relying on magic rather than technology). He shows the tales of Sindbad as anchored in the reality of early Arab maritime exploration, pointing to the invention of mathematical instruments and the development of cartography as ancillary to early voyages of commerce, and devotes a chapter to the Utopian impulse, beginning with Thomas More and tracing this back through the Arab world to Al-Farabi and thence to Plato.

He credits the seventeenth-century Italian writer Tommaso Campanella with introducing the first 'scientific' elements to the genre, by his description of a device resembling a hovercraft, and his prediction that technology would obviate the need for slavery (further referencing the

¹⁷⁰ Ibid, pp. 124 - 129.

¹⁷¹ 'Azzām, *Al-Khayāl al-'Ilmī fī al-Adab*, p. 7.

¹⁷² Ibid., p. 8.

nineteenth century early socialist pioneer Etienne Cabet's influential 1845 text *Icaria*).¹⁷³ This heralds a brief detour into the history of socialism and the work of Robert Owen, Charles Fourier, Joseph Proudhon and William Morris. He deems Aldous Huxley the first to write of a scientific 'Utopia', acknowledging his critique of the human cost of maintaining mass public passivity, and describes two of Wells' dystopias, before ending with a single reference to modern Arabic SF, being a brief account of the Egyptian writer Salāma Mūsa's *Al-Khayma* (The Tent) (1926), a text featuring peaceable vegetarians with wireless communications devices, pragmatic procreational marriages and a cloud-seeding device (the eponymous Tent) to prevent Nilotic drought.¹⁷⁴

'Azzām also explores in detail the 'lost world' and 'journey to the centre of the Earth' topoi with reference to Russian and American authors. The Arab SF contribution forms a rather miserable coda to this symphony of Western creativity; Nihad Sherif's *Sukkān al-'ālam ath-thānī* (Inhabitants of the Second World) is accorded a mere sentence in this chapter.¹⁷⁵ A diversion into the history of space discovery prefaces an account of the development of the Western genre from Verne and Rosny to Bradbury, Wells, Arthur C. Clarke and A. E. Van Vogt. There follows a more detailed section on Arabic SF entitled 'Planetary Conquest in Contemporary Arab Literature'¹⁷⁶ when he introduces the leading writers; for 'Azzām, Towfiq Al-Ḥakīm was the (unwitting) originator of Arabic science fiction; he sees Al-Hakm, Fathy Ghanem and Yusuf al-Siba'i as adaptors of the Western genre for domestic consumption, although although he believes that Sherif was the first to specialise, with the *Raqm 4 Yā'Omrkum* (Number 4 Commands You) stories.¹⁷⁷

However, for 'Azzām it is the Syrian astronomer, broadcaster and prolific SF writer Talib Omran who is "indisputably, the pioneer" of the genre;¹⁷⁸ he praises not only his dialogue and creativity, but his motive for writing, an actively pacifist and pro-science agenda.¹⁷⁹ He also mentions the Egyptian Moustafa Mahmoud's early SF work *Al-'Ankabūt* (The Spider) (1964), a work based on the theory of the transmigration of the soul through the pineal gland, in which a neurosurgeon experiments on patients using a 'magical elixir' that reveals their

¹⁷³ Ibid., p. 29.

¹⁷⁴ Ibid., pp. 35 – 36.

¹⁷⁵ Ibid., p. 43.

¹⁷⁶ Ibid., p. 68.

¹⁷⁷ Ibid., p. 73.

¹⁷⁸ Ibid., p. 74.

¹⁷⁹ Ibid., p. 75.

past lives, and *Rajul taht al-Şifr* (Man Below Zero) (1967), in which a scientist succeeds in finding the secret of teleportation. Sherif is represented by his 1974 novel *Qāhir al-Zaman* (Conqueror of Time), the tale of a renegade scientist's doomed attempts to extend human lifespan using cryogenesis. The book ends abruptly, with the simplistic assertion that science fiction's fundamental concern is with the prospects of peace for humanity.

Al-Khayāl Al-'Ilmī fī al-Adab shows an impressive knowledge of the comparative literature, displaying familiarity not only with Verne and Wells but with Plato, More, Swift and a number of Russian and American writers. It is a general account of the history of science and Western science fiction, interspersed with lengthy plot synopses of the author's favourite Arabic science fiction works, but nonetheless, it is an important early work, given the lack of other original Arabic language studies of the genre at the time, and a useful introduction to the main Arab science fiction writers.

While 'Azzām's book was intended as a universal survey of science fiction, rather than a survey of the Arabic genre alone, former Egyptian culture minister, critic and broadcaster Yusuf Al-Sharuni focusses upon Arabic production only in his 2000 work *Al-Khayāl al-'Ilmī fī Al-Adab Al-'Arabī Al-Mu'āsir* (Science Fiction in Contemporary Arabic Literature). The author claims to have written it not for any particular reason, but as part of a stage in his own literary development, inspired by his sense of wonder upon reading Sherif's *Qāhir al-Zaman* (Conqueror of Time) in 1971.¹⁸⁰

The first part consists largely of lengthy descriptions of the plots of Sherif's novels *Qāhir Al-Zaman* (Conqueror of Time) and *Sukkān al-'ālam ath-thānī* (Inhabitants of the Second World), followed by equally iterative passages on the plots of three other novels, Muḥammad al-Hadīdī's *Shakhs Ākher fī al-Mir'āt* (The Other Person in the Mirror), a brain transplant horror story, Hassan al-Qadrī's *Hurūb illa al-Faḍa'* (Escape to Space) (a Utopia), and Omayma Khafaji's *Jarīmat Al-'Ālam* (Crime of a World) (a genetic engineering dystopia). The second part considers the work of ten Arab writers,¹⁸¹ consists almost entirely of plot synopses and is virtually devoid of any critical comment. Perhaps his aim was simply to familiarise the reader with the texts; however, for the reader who already has access to the

¹⁸⁰ Al-Sharuni. *Al-Khayāl al-'Ilmī*, p. 9.

¹⁸¹ Yusuf Ezzedine Issa, Towfīq al-Hakīm, Fathy Ghāaem, Yusuf Al-Siba'i, Sa'ad Makāwī, Muḥammad Al-Hadīdī, Moustafa Mahmoud, Nihad Sherif, Ra'ūf Waşfi and Aḥmed 'Abd Al-Salām Al-Baqqāli.

texts, the lack of comment or analysis does not throw any light on the Arabic genre as a whole. The third part purports to be an examination of the theme of Utopia in four novels¹⁸² – *Sukkān al-'ālam ath-thānī* (Inhabitants of the Second World), the Moroccan 'Abd Al-Salām Al-Baqqālī's *At-Ṭawfān al-Azrāq* (The Blue Flood), Hassan al-Qadrī's *Hurūb illa al-Faḍa'* (Escape to Space) and Ṣabrī Mūsa's *Al-Sayyid min Ḥuql al-Sabānkh* (Lord of the Spinach Field) - but, although there is an introduction to Utopias that takes in the major Western authors, again, iteration of plot is paramount, to the extent that some large identical blocks of text on works discussed earlier are actually reproduced again in full in various sections of the book.

The remainder of the text is taken up with a short consideration of flying saucers in the works of Nihad Sherif, and plot synopses of the *Pale Man - Multiple Man - Extinction of Man* trilogy by the Kuwaiti writer Tiba al-Ibrahim, concluding by lamenting the lack of scientific progress in the Arab world, and expressing the hope that Arabic SF might encourage scientific development in the Arab world.¹⁸³ *Al-Khayāl al-'Ilmi fī Al-Adab Al-'Arabī Al-Mu'āsir* is of interest because its author was a respected and influential public figure in the literary world, who clearly wished to support and encourage the Arabic genre, but, although the work is of little critical value, it performs a valuable service in drawing the unfamiliar reader's attention to the texts, many of which are now out of print.

2.2.4 Articles

'Isām Bāhī's 1982 article "Ruwāyat al-Khayāl al-'Ilmi wa Ru'an al-Mustaqbal"¹⁸⁴ is the earliest Arabic-language critical text. Bāhī traces the genre back via the Western history to Kepler's *Somnium* (1634), but cites Verne and Wells as the 'true pioneers' of the science fiction novel. Bāhī is well informed about the history of SF, although a close reading reveals a considerable dependency upon a small number of Western sources, which may signify a lack of familiarity with the primary texts. His view is that science fiction is an art form based upon ideas rather than on ingenuity of plot or studied characterisation, and that the genre has more in common with folk-tales than it does with 'serious' literature. For Bāhī, science

¹⁸² Al-Sharuni. *Al-Khayāl al-'Ilmi*, p. 183.

¹⁸³ Ibid., p. 288.

¹⁸⁴ 'Isām Bāhī, "Ruwāyat al-Khayāl al-'Ilmi wa Ru'an al-Mustaqbal." *Fuṣūl* vol. 2.2 (January to March 1982): pp. 57 - 65.

fiction definitely does not aim at Aristotelian catharsis, aspiring instead simply to the freeing of the human imagination.¹⁸⁵

Bāhī suggests that SF is popular in the developed world because science has a greater place in daily life there, and there is a greater consciousness of the moral ambiguity inherent in certain scientific advances.¹⁸⁶ He draws a distinction between western SF writers who see science in action in their everyday lives and who do not need to have a specific agenda to promote science, versus Arab writers, who do.¹⁸⁷ For Bāhī, Arabic SF must have a practical function as the clarion call for the promotion of science in the Arab world “as the only way out of the historical bottleneck/blind alley in which we find ourselves”, and he argues that the West’s detachment from human and spiritual values has by association given science a poor image in the Arab world.¹⁸⁸

The rest of the article is devoted to an approving examination of the work of Nihad Sherif, starting with his exploration of the future in *Qāhir Al-Zaman* (Conqueror of Time). Although of the opinion that the output of genuine Arabic SF is extremely small, he credits Moustafa Mahmoud, Nihad Sherif and Yusuf Ezzedine Issa with broadening its appeal, although their contributions are apparently so insignificant that their mention is confined to footnote 23. Bāhī is also the author of a book-length study of SF, *Al-Khayāl al-‘Ilmī fī masraḥ Towfīq al-Hakīm* (Science Fiction in the Plays of Towfīq Al-Hakīm).¹⁸⁹

Medhat Djarar’s theoretical approach in his 1984 article “The Problem of Modernity in the Science Fiction Novel”¹⁹⁰ sought to position Arabic SF within the framework of the larger phenomenon of modernity in Arabic literature. In addition to experimentation and metaphor, Djarar believed that a focus on the future and on solving problems is a characteristic of modernity and one that is also a defining characteristic of SF. While acknowledging that SF is a worldwide genre, he uses the word ‘moḥāwalāt’, ‘attempts’, to describe Arabic SF production.¹⁹¹ His preferred author is the Egyptian Ṣabrī Mūsa, author of *Al-Sayyid min Haql*

¹⁸⁵ Ibid., p. 59.

¹⁸⁶ Ibid.

¹⁸⁷ Ibid. pp. 59 - 60.

¹⁸⁸ Ibid., p. 60.

¹⁸⁹ ‘Isām Bāhī, *Al-Khayāl al-‘Ilmī fī masraḥ Towfīq al-Hakīm* (Cairo: General Egyptian Book Organisation, 1993).

¹⁹⁰ Medhat Djarar, “Mushkila Al-Ḥadātha fī Ruwāyāt al-Khayāl Al-‘Ilmī.” *Fuṣūl*, vol. 4 (September 1984)

¹⁹¹ Ibid., p. 181.

al-Sabānikh (Lord of the Spinach Field) (a full-length novel with a serious theme and sophisticated narration and characterisation, which will be examined in this study). Again, much of the article is taken up with a detailed plot description of this text, concluding with an analysis of the novel's success. Djayar criticises the characterisation as 'stereotypical' and 'symbolic', but relieves Mūsa of the charge of poor technique, arguing that the tone and language are chosen precisely for the reason that in the novel humans are evolving into robots.¹⁹² He cites Mūsa's neologisms as a demonstration of his skill in creating a believable version of a future world,¹⁹³ but confesses that he yearns after more modernity in the telling, concluding that new material needs new language.

Al-Qāsim's 1990 article "Adab al-Khayāl as-Siyāsī" in *Al-Karmel* (1990, vol. 36 - 37, pp. 285-301) is primarily a discussion of (also mainly Western) political speculative fiction such as Orwell's *1984*, though he admits that this type of fiction overlaps with SF. The difference for Al-Qāsim is that SF deals with the implications of scientific and industrial development on society in the form of fantastical occurrences such as space invasions, while political fiction is mainly interested in the impact of ideologies, revolutions, social relations and religious extremism. Most of the article is devoted to discussion of *1984* and the works of other Western dystopian writers; in this respect, in paying greater attention to the Western corpus, he is consistent with most other Arab critics of SF.

Michael Cooperson's 1998 article "Remembering the future: Arabic time-travel literature"¹⁹⁴ deals mainly with time-travel as literary device in non-SF texts. In 2000, Reuven Snir's article in *Der Islam* "The emergence of science fiction in Arabic literature",¹⁹⁵ follows Pierre Cachia's perception of the significance of 'gaps' in Arabic literature, making a case against the unjustifiable dominance of *soi-disant* "highbrow culture" in current scholarship. Snir credits translations of American SF short stories with the "infiltration" of the genre into Arabic literature, dividing its practitioners into pulp writers seeking popularity, and serious authors consciously attempting to build a canon.

¹⁹² Ibid., p. 184.

¹⁹³ Ibid.

¹⁹⁴ Michael Cooperson, "Remembering the future: Arabic time-travel literature." *Edebiyat*, vol. 8, no. ii (1998): pp. 171 - 189.

¹⁹⁵ Reuven Snir, "The emergence of science fiction in Arabic literature." *Der Islam*, vol. 77, no. ii (2000): pp. 263 - 285.

Jalal Shawqi and Ahmed Abu Zayd's 2003 article "Al-Khayāl al-'Ilmī wa mustaqbal al-wa'y al-insānī" takes the view that SF responds to contemporary scientific developments - "a novelistic fiction enculturated by science, following the achievements of science"¹⁹⁶ - adding a condition that SF should be based on scientific reality, or on events that are within the bounds of possibility. They note the tension between the celebration and the fear of science that most critics take to be a central feature of the genre. A generalised prologue on scientific development, peppered with references to famous Western SF authors, proves to be merely an introduction to the authors' true interest, American 'futurist' Jerome Clayton Glennie's *Future Mind: Artificial Intelligence* (full title: *The Merging of the Mystical and the Technological in the 21st Century*). Their enthusiasm for this work and its emphasis on the benefits of cybernetic prosthetics and nanotechnology dominates much of the article.

2.2.5 Doctoral Theses

'Azza Ghānim's 1988 doctoral thesis at the University of Ain Shams in Cairo is the first lengthy Arabic language study of SF, Ghānim herself noting at the outset that no specialist academic study on Arabic science fiction had yet been undertaken.¹⁹⁷ Like 'Azzām, she begins with a chronology of early European – interestingly, not Arab - scientific discovery, before returning to the (again European) genre with Verne and Wells' predictions of air and undersea travel and moon landings, as well as the problems presented by robots in Butler's *Erewhon*, Karol Capek's *Robot* and E.M. Forster's short story *The Machine Stops*. She frames the history of science fiction in three stages – the mythical / classical to the nineteenth century, the 1920s pulp wave in the USA, and the contemporary. Her historical overview takes in the Stone Age, Bronze Age, Prometheus, and early European creation myths, as well as ancient Egyptian religion, Icarus, Gilgamesh, Lucian's *Vera Historia*, Chaldean astronomy and James Frazer's *The Golden Bough*. A reference to thirteenth century Persian polymath's Al-Qazwini's *Wondrous Creatures* leads to a long passage on sea-monsters, thence to Al-Farabi, Swift's *Gulliver* and Edgar Rice Burrough's *Tarzan* as heirs of Ibn Tufayl,¹⁹⁸ a position that seems designed to display the writer's knowledge of the history of the literary

¹⁹⁶ Shawqi and Abu Zayd, "Al-Khayāl al-'Ilmi wa Mustaqbal al-wa'y al-insānī." *Al-Arabi* magazine (October 2003), p. 30.

¹⁹⁷ 'Azza Ghānim, *Al-Ibdā' al-fannī fī Qiṣaṣ al-Khayāl al-'Ilmī*, PhD Dissertation, University of Ain Shams, Cairo, 1988, p. 8.

¹⁹⁸ Ibid., pp. 71 - 82.

fantastical, rather than create a cogent argument for viewing any of these myths as proto-science fiction.

Only a few paragraphs in the introduction are devoted to the Arabic contribution to the genre,¹⁹⁹ as in her opinion there has been nothing of note recently except for two authors; Towfiq Al-Ḥakīm's short story *Fi-Sinnat Malayūn* (In the Year One Million) and his play *Rihlah illa al-Ghad* (Journey to Tomorrow), and Moustafa Mahmoud's novels *Al-'Ankabūt* (The Spider) and *Rajul taḥt al-Ṣifr* (Man Below Zero). Like Al-Sharuni, Omran and Bāhī, she names Nihad Sherif as the most significant Egyptian SF writer, and once again, much of the latter part of the thesis is taken up with plot synopses, in particular of Sherif and Mahmoud's work, as well as of Mūsa's *Al-Sayyid min Huql al-Sabānkh* (Lord of the Spinach Field) and Al-Azharī's *Kawkab Al-Mal'ūn* (Cursed Planet).

There are brief flashes of criticism and analysis; she notes the improbable fact in H. G. Wells' *The First Men in the Moon* that the moon's inhabitants are scientifically advanced, yet apparently unable to defeat the human invaders.²⁰⁰ The criticism is generally weak though, especially of the Arab authors, where only praise is given. The plots are retold in great detail, and the 'analysis' following them is very similar for each author. On several occasions she simply reproduces whole pages of the original texts, for example at p. 99 there is a very long extract from *Rajul taḥt al-Ṣifr* (Man Below Zero). While Ghānim appears to have consulted the original Arabic SF texts, with regard to non-Arabic texts she appears to be reliant on Amit Ghoswani and other authors of articles taken from the UNESCO Courier 1984 special journal edition on science fiction, as well as on certain British writers – Colin Wilson and Ifor Evans – and the Egyptian critic Angele Botros Samaan, traits shared with 'Isām Bāhī's 1982 article, suggesting that she may have borrowed her sources, if not her actual references, from his work.²⁰¹ Overall, her thesis shows a very detailed knowledge of the Arab authors, as well as an impressive awareness of the history of world science fiction, but the discursive, analytical element is unfortunately overshadowed by the many pages of detailed and uncritical plot description.

¹⁹⁹ Ibid., p. 24.

²⁰⁰ Ibid. pp. 23 - 24.

²⁰¹ 'Isām Bāhī, "Ruwayāt al-Khayāl al-'Ilmī wa Ru'an al-Mustaqbāl" *Fuṣūl* vol. 2.2 (January to March 1982), p. 58 and Ghānim, "Al-Ibdā' al-fannī fī Quṣuṣ al-Khiyāl al-'Ilmī", p. 24.

Mahā Mazlūm Khadr's 1999 thesis "Binā' ruwāyat al-khayāl al'ilmī fī al-adab al-miṣrī al-mu'āsir" (Structuring Science Fiction Novels in Modern Egyptian Literature)²⁰² is narrowly focussed upon narratological devices, polyphony and spatio-temporality in early Egyptian science fiction, following the theories of Genette and Bahktin. Her introduction traces the genre back to Greek and early Islamic sources, figuring Plato and Al-Farabi as early Utopians with Lucian of Samosata, Cyrano de Bergerac and Voltaire. She provides a list of early Arabic science fiction works that is not confined to Egypt, but does fix the beginning of the novelistic genre in Egypt in the 1960s, following the late 1950s plays of Towfīq Al-Ḥakīm. Her own literature review includes Ghānim's thesis and a 1990 study of SF short stories in Arabic by Mohammed Naguib al-Tilawi. Again, large sections of the thesis are devoted to plot description and analysis of modes of narration of the subject Egyptian SF texts.

As a speaker at the 2009 French Science Fiction conference in Bellaing, Kawthar Ayed contributed an excerpt from her thesis dealing with early Arab responses to SF, including harsh criticism from Naguib Mahfouz. His unflattering comments prefaced the 1974 publication of *At-Ṭawfān al-Azrāq* (The Blue Flood) by the Moroccan 'Abd Al-Salām Al-Baqqāli, who identified his own work as one of 'science fiction'. Mahfouz argued in the journal *Al-Mihwar* that he could not take the genre seriously; as the writer of 'realist' literature, he could not comprehend the value of a narrative that was unlikely to be realised:-

"It is difficult to consider this genre, science fiction, as a serious genre, because serious literature in my view, presents a real-life human experience, and as for science fiction that invents scientific things, and imagines their effect on mankind in the future – well, if it comes true, the literary work doesn't have value, and if it doesn't, it just stays fiction! So I rarely read this literature or enjoy it, as it creates emotions and expectations in me, then presents a solution: it's nothing but empty words and we don't know if they'll ever be realised or not..."²⁰³

Baqqāli riposted: "Desolé professeur Naguib....la littérature de SF n'est pas un assemblage de balivernes", and both Mahfouz's criticism and this response were published in the preface to the 1986 Tunisian edition of the book. Baqqāli cunningly or possibly sincerely invokes God

²⁰² Mahā Mazlūm Khadr, *Binā' ruwāyat al-khiyāl al'ilmī fī al-adab al-miṣrī al-mu'āsir* (PhD Dissertation, Cairo University, 1999).

²⁰³ Ayed, citing "Abd Assalam al-Baqali dans l'avant propos du Deluge Bleu", Maison Tunisienne d'Edition, 1986. p.8 in *Géante Rouge* 15, August 2009, p. 27.

on his side, arguing that human imagination is a divine gift, and alleging that ‘our big brother’, Mahfouz, had not actually read any SF, or none but mediocre texts. He suggested that science fiction’s themes were among the most noble of humanity, and credited it with sounding the tocsin for many problems of the modern world.²⁰⁴

The Tunisian Hechmi Khalladi contributed a short article to the same edition of *Géante Rouge* (his article was also published in Tunisian newspaper *Le Temps* on 23 January 2009), lamenting that the genre “ne pouvant sortir des sentiers battus de la littérature arabe”. He opines that SF partially developed as a way out of religious ‘mediaeval’ obscurantism, and suggests reasons why the genre is not flourishing, such as the lack of specialist publishing houses and writers’ lack of scientific knowledge, but dismissing the notion that the Arabic language is unsuited to the genre.²⁰⁵

2.2.6 Conclusion

The characteristics that link all of these critical source materials are not positive: firstly, most of the works, including the full-length books, are in fact devoted mostly to Western and/or Russian SF, with relatively little space reserved for Arab writers. In fact, ‘Iṣām Bāhī, the author of the one of the longer Arabic articles specifically devoted to SF, is dismissive of Arabic contributions to the genre:- “It doesn’t really exist in modern Arabic literature other than in an extremely limited form....you could count [them] on your fingers!”, although at the time of writing, 1982, it is true that there were only a handful of texts.²⁰⁶

Secondly, the vast majority of the Arabic critical corpus is heavily descriptive, rather than discursive. In addition, only Snir and Khammas, writing in Western languages, give even a basic overview of the Arabic genre. There is a noticeable uniformity; they tend to begin with a general discussion of scientific development, taking in early Western scientific pioneers such as Newton and Galileo,²⁰⁷ before turning to early classical myth, the *Thousand and One Nights*, or Kepler’s *Somnium* as the earliest precursors of the genre. There is a short tour of the modern Western writers such as Jules Verne, H. G. Wells and Aldous Huxley, and a

²⁰⁴ Ibid, p. 28.

²⁰⁵ Hechmi Khalladi in *Géante Rouge* 15, August 2009, p. 35.

²⁰⁶ ‘Iṣām Bāhī, “Ruwayāt al-Khayāl al-‘Ilmī wa Ru’an al-Mustaqbāl.” *Fuṣūl* vol. 2.2 (January to March 1982), p. 59.

²⁰⁷ Ibid., p. 57, and Ghānim, “Al-Ibdā’ al-fannī fī Quṣṣ al-Khayāl al-‘Ilmī”, p. 14.

cursory mention of various twentieth century scientific discoveries such as the atomic bomb, robots and genetic engineering, a division of the genre into classes²⁰⁸ (for example, ‘Azzām’s claim that SF falls into two broad categories, humanistic Utopianism and science-based fantasy),²⁰⁹ before they reveal their real intention, which is to discuss one author, or one work, at length by parroting the plot in great detail and concluding with a few sentences of panegyric at the end.

Each critic also has a particular fondness for their favourite author – for ‘Azzām, it is Talib Omran; for ‘Azza Ghānim and ‘Iṣām Bāhī, it is Nihad Sherif; for Medhat Djayar, it is Sabrī Mūsa. This points to an assumption of the reader’s lack of familiarity with a wider range of source texts, which would seem fair, given their general relative obscurity or identifiability as part of a corpus or canon due to the long periods between the publication of Arab texts considered to be SF. However, while this type of descriptive study has some value as an introduction to Arabic SF for an unfamiliar audience, there is generally lack of actual critical comment and consideration of the Arabic texts.

There is also a surprising degree of dependency upon Western critics for opinions: references frequently short-circuit back to the same group of translated (Western) works, which brings us to the disappointing conclusion that Bāhī’s 1982 article is little more than a patchwork of borrowings from western critics, and that this tarnishes the shine on Ghānim’s 1988 thesis, the footnotes of which in the early chapters bear a strong similarity to now-obscure or outdated (Western) sources consulted by Bāhī. This suggests that with regard to critical source material, these Arab critics were to a great extent at the mercy of the available translations, and dated ones at that.

In summary, until very recently there has been relatively little criticism of Arabic SF in other languages, and the critical literature in Arabic is highly iterative with very little thematic or other analysis. The following chapters will attempt to map the major SF themes prevalent both in the West and in the Arab world, and examine a selection of Arabic SF texts in order to formulate directly from the sources our own position on the literature, its merits, problems, themes, intertextualities and influences.

²⁰⁸ See Bāhī, *ibid.*, on the distinction between Terra/Spatia Incognita and the Utopian / Dystopian novel, p. 58.

²⁰⁹ ‘Azzām, *Al-Khayāl al-‘Ilmī fī al-Adab*, p. 10.

Chapter 3: Translation and the Origins of Modern Arabic Science Fiction

3.1 Translation

This chapter considers the beginnings of science fiction as an Arab literature. The critics trace its origins to the fantastical indigenous folk and fairy tale literature now reified as part of the *adab* canon,²¹⁰ but SF is a modern, imported literature, beginning with the post-industrial space and time travel-themed texts produced by Arab writers during the post-war period, almost eighty years after the first translations of European SF appeared in Arabic. The discussion focuses to a large extent upon literary production in Egypt, because this was and is a major source of literary production in general in the Arab world, and the source of the majority of translated published work;²¹¹ also, most of the Arab writers of SF – for example, Towfiq Al-Ḥakīm, Nihad Sherif and Nabil Farouk – are Egyptian.

In *The Genesis of Arabic Narrative Discourse*, Sabry Hafez observed that genres tend to emerge as a response to public need, and that translations help to ease the strangeness and enable audiences to become adjusted to new ideas.²¹² This chapter will briefly examine the origins of the genre in the Arab world, and the impact made upon it by the first translations of foreign SF works.

SF has been a popular literary genre in the West since the futuristic romances of Wells and Verne first appeared in the late nineteenth century, followed by the American pulp magazines in the 1920s, which in turn influenced its development in France²¹³ and elsewhere. In France, SF was barely published, even after Verne, except in magazine format.²¹⁴

²¹⁰ Richard Jacquemond, *Conscience of the Nation: Writers, State and Society in Egypt* (Cairo: New York: The American University in Cairo, 2008), Introduction, p. 10.

²¹¹ Ibid, p. 12.

²¹² Sabry Hafez, *The Genesis of Arabic Narrative Discourse* (London: Saqi Books, 1993), pp. 105 - 107.

²¹³ J-M Gouvanic, *La Science Fiction Française au XXe siècle (1900-1968)* (Amsterdam and Atlanta, Georgia: Rodopi, 1994), p. 167.

²¹⁴ Ibid. *Magazines Sciences et Voyages et Intrepide* did publish science fiction in French, and the stories were popular, although the magazines did not sell on the same scale as those in the USA. Although the publisher Hachette offered the Prix Jules Verne, and there was no shortage of authors, full length SF works in French were rarely published.

SF flourished in Russia after the 1905 revolution,²¹⁵ and in Japan, SF magazines began to appear from the 1920s onwards.²¹⁶ Patrick McGuire estimates that by 1975 there were 150 works of Russian SF,²¹⁷ while in the US, Stableford calculates that SF accounted for 10% of all published literature by 1987,²¹⁸ and in the UK, Davies estimated the same percentage for SF in proportion to general fiction in 1990.²¹⁹

In 2006 Achmed Khammas made a tentative suggestion of thirty-five as the number of published Arab SF novels, while in 2012 the journalist Yazan Al-Saadi contrasted the abundance of new American SF with the relative paucity of Arab output:-

Under such a monumental shadow, Arab sci-fi works are usually perceived locally and externally as feeble imitations in form, content, and consumption. Arabic science fiction, parallel to Western sci-fi's experience, is still trying to gain mainstream legitimacy and canonization.²²⁰

Al-Saadi acknowledges the greater powers of the US publishing houses with regard to distribution and marketing, but the point is clear – Arab SF output is numerically and proportionately lower than in the West, and suffers from its perception as an inferior type of literature, partly due to its perceived status as an essentially plagiarized, imported, genre.

²¹⁵ Patrick L. McGuire, *Red Stars: Political Aspects of Soviet Science Fiction* (Ann Arbor, MI: UMI Research Press, 1985), p. 7; many of these were translations of foreign texts.

²¹⁶ Robert Matthew, *Japanese Science Fiction: A View of a Changing Society* (London: Routledge and Nissan Institute of Japanese Studies, University of Oxford, 1989), pp. 13 - 15. According to Matthew (p. 7), Japan deliberately imported Western SF as part of a modernising agenda; Jules Verne's works were translated into Japanese only a few years after they were written. Also see Wong-Kin Yuen, Gary Westfahl and Amy Kit-sze Chan (eds), *World Weavers: Globalization, Science Fiction, and the Cybernetic Revolution* (Hong Kong: Hong Kong University Press, 2005), p. 58: after Japan began to open to the outside world in 1868, it wanted to catch up with Europe and America and saw the import of SF as a way to achieve this; *Around the World in 80 Days* (1873) was translated in 1879 into Japanese, as was *20,000 Leagues Under the Sea*; both were very popular.

²¹⁷ McGuire, *Red Stars*, preface, p. xiv.

²¹⁸ Brian Stableford, *The Sociology of Science Fiction* (San Bernardino, CA: Borgo Press, 1987), p. 65. According to Broderick (quoting Frank Cioffi), over 30% of America's literate public read the SF pulps of the 1930s. Damien Broderick, *Reading by Starlight* (London: Routledge, 1995), p. 22.

²¹⁹ Philip John Davies, Chapter 1 "Science fiction and conflict" in Philip John Davies, ed., *Science Fiction, Social Conflict and War* (Manchester and New York: Manchester University Press, 1990), p. 2; he quotes Frederick Pohl as suggesting that the figure was as high as 25% in the USA.

²²⁰ Yazan Al-Saadi, "Arabic Science Fiction: A Journey Into the Unknown", *Al-Akhbar*, 3 June, 2012. Permanent URL: <http://english.al-akhbar.com/node/7995>. Accessed 29.2.16.

In the Arab world, illiteracy is a major problem when attempting to meaningfully contrast publication numbers with other literatures;²²¹ poor copyright enforcement²²² and censorship compound this difficulty. Also, although the adult literacy rate in Egypt has improved greatly since the 1960s, when SF began to achieve higher popularity through the work of Moustafa Mahmoud, the price of books remains relatively high. In *The Illusion of Progress in the Arab World* (2006), Galal Amin reproduces the statistics on book publication per person given in the controversial 2002 UNDP Arab Human Development Report, although he is strongly critical of this approach as a measure of real human development.²²³ Allowing for this lack of full access to this, or any, literature, Allen Douglas and Fedwa Malti-Douglas point to the very lack of copyright enforcement that frustrates easy analysis of sales figures, suggesting that relatively low sales figures do not necessarily equate to low circulation or popularity.²²⁴

Regarding censorship, Jacquemond points to the historical state control of the Egyptian press that presents a potential further barrier to the spread of heterodox ideas via the printed word.²²⁵ There is no evidence that the Arabic translations of Verne and Wells were seen as problematic by Al-Azhar or the state, while Wells' social comment was subject to editing in Soviet translations,²²⁶ and Soviet SF writers such as Strugatsky and Yefremov were marginalized until after the death of Stalin, as it was feared that their work could raise the public's expectations of a leader.²²⁷

²²¹ According to the UNDP Egypt Human Development Report 2003, the adult literacy rate in Egypt in 1960 was 25.8% and in 2001 65.6%. According to the World Bank, it was 74% in 2012 (<http://data.worldbank.org/indicator/SE.ADT.LITR.ZS>, accessed 29.2.16). Jacquemond notes that, although adult literacy has risen since 1960, "the reading public for literature seems to have stagnated". Jacquemond, *Conscience*, p. 71.

²²² Ibid., pp. 149 - 150.

²²³ Galal Amin, *The Illusion of Progress in the Arab World* (Cairo and New York: The American University in Cairo Press, 2006), pp. 47 - 51. Here Amin questions the very validity of statistical measurement as a yardstick of true value, and wonders "what exactly is so wonderful about an increase in the numbers of people reading newspapers, translating books, or using the telephone?" He casts doubt on the impact of knowledge acquisition through translation, chiding the UN for apparently giving greater weight to the adverse impact of "authoritarian rule and religious extremism" than to what Amin considers to be the true problem, poverty.

²²⁴ Allen Douglas and Fedwa Malti-Douglas, *Arab Comic Strips: Politics of an Emerging Mass Culture* (Bloomington, IN: Bloomington Press, 1994), p. 3. They refer to the practice of copying or sharing texts in the absence of copyright enforcement.

²²⁵ Ibid., p. 5. See also p. 33 for an account of the Haydar Haydar affair of 2000, when the author of a Syrian novel published in Egypt was accused of blasphemy, as a result of which Al-Azhār requested future censorship rights, and pp. 57 - 71 for an account of Al-Azhār's censorship of Naguib Mahfouz's *Children of Gebelawi*.

²²⁶ McGuire, *Red Stars*, p. 5; he also reports that the authorities used the excuse of a paper shortage for the political suppression of SF texts, p. 95.

²²⁷ Istvan Csicsery-Ronay, *The Seven Beauties of Science Fiction*. Middletown, CT: Wesleyan University Press, 2008), p. 114.

The modern history of translation from European languages into Arabic in Egypt (the source of the majority of Arabic SF published to date) arguably began with Mohammed Ali's foundation of the al-Taḥṭāwī's Madrasat al-Alsun (School of Languages) in Cairo in 1835, which mainly translated military and scientific textbooks.²²⁸ Translations of literary works during this period were "random and unsystematic",²²⁹ and, in addition, many 'translations' were inaccurate, paraphrased or reconstructed chiefly from the translator's memory of the book.²³⁰ In 1868, the Jam'iyyat al-Ma'ārif (Society of Knowledge) was founded in Egypt to spread education and culture through translation.²³¹ By then, a robust journal culture had sprung up to accommodate the growing Egyptian demand for political debate, as well as to feed the public's burgeoning appetite for entertaining new short stories, which could quickly be met by translating and adapting European texts; however the vast majority of this journal content was political, rather than scientific or literary, in content.²³²

French cultural and colonial dominance of Egypt at the time was reflected in the selection of translation material, although translators began to pay more attention to English texts after the British occupation in 1882, while the arrival of Russian Orthodox missionaries in the Levant sparked translations of Russian literature into Arabic.²³³ According to Hafez, by 1919 there were more than twenty French writers whose work had been translated into Arabic, compared with only five English writers.²³⁴ Henri Pérès compiled an inventory of the translated French texts in a 1937 article quoted by Hafez and Moosa in their surveys of the origins of modern Arabic literature.²³⁵

²²⁸ Matti Moosa, *The Origins of Modern Arabic Fiction* (2nd edition) (Boulder and London: Lynne Rienner, 1997), p. 5; pp. 97 - 98.

²²⁹ Ibid., p. 97. Kishtainy is more direct: "Arab writers went into a book shoplifting spree, translating, adapting, vandalizing, pirating, readapting and rehashing anything falling into their hands." Khalid Kishtainy, *Arab Political Humour* (London: Quartet Books, 1985), p. 70.

²³⁰ Ibid., Moosa's account of the Arabic-Russian translator Khalil Ibrahim Baydas, who summarised texts rather than translating them in full (p. 102), and Yaqub Sarruf's alterations to Walter Scott's *Talisman*; plagiarism and lack of attribution was also rife (p. 106), and the infamous Tanius Abduh's 'translations' written roughly from memory (p. 107). There was also a tendency to 'Arabise' texts, to make them "conform to the aesthetic and moral codes then governing written expression in Arabic": Jacquemond, *Conscience*, p. 111.

²³¹ Elisabeth Kendall, *Literature, Journalism and the Avant-Garde* (London and New York: Routledge, 2006), Introduction, p. 9.

²³² Ibid., p. 13.

²³³ Syrian Christian immigrants to Egypt concentrated on translation of French literature because of the Maronite long-standing relationship with France: Moosa, *Origins*, pp. 98 - 100. See Hafez, *Genesis*, pp. 91 - 97 for an account of the early influence and success of Russian schools and translators in the Levant.

²³⁴ Hafez, *Genesis*, p. 90.

²³⁵ Henry Pérès, "Le Roman, le conte et la nouvelle dans la littérature arabe moderne" in *Annales de L'institut d'Études Orientales*, vol. 3, 1937, pp. 266 - 337. The most frequently translated (and presumably popular) authors listed are Guy de Maupassant and Alexandre Dumas.

The proliferation and popularity of these fiction translations was an important outworking of the discourse that had begun with the 1798 French invasion, concerning the value accorded to indigenous production of all kinds, and on what, if anything, should be imported from the West to benefit the Arab world.²³⁶ This question exercised the nineteenth-century reformists in Egypt from the time of the invasion, as political control oscillated between reformers such as Muhammad Ali, who sent the first educational missions to Europe, to the regressive conservative Abbas I, who closed down all schools except the military academy, to the political tempests raised by the 1882 British occupation, to the world wars and the military coup of 1952.²³⁷ Much early original novelistic effort in Arabic was directed towards social realism, self-consciously distanced from the early stock-characters and situations of traditional folk-tale and fantasy, and driven by a desire to examine the reality of the impact of modernity on the Egyptian and wider Arab world.²³⁸ The binary of the indigenous/Orient versus the imported/Western continued to spark debate in the Arab world at the time when Arab SF began to gain popularity in the 1980s,²³⁹ and the recent upsurge of discourse on modern Arabic SF is a continuing manifestation of this fascination.

The first modern European SF was translated into Egyptian surprisingly quickly. Pérès lists four translated works by Jules Verne published between 1875 to 1894, (also reproduced in full by Moosa).²⁴⁰ Abd al-Qadir al-Mazini, who translated Oscar Wilde's work, also translated *She* by H. Rider Haggard, and H. G. Wells' *The Time Machine*, as well as some short stories by Wells, although in the introduction to the collection, he confessed to skipping

²³⁶ See Kendall, *Literature, Journalism*, pp. 42 - 43 for the syncretist view of Salama Musa acting as editor of *Al-Majalla al-Jadida*, warning that the Arab world faced destruction if it did not adapt to the West, and the huge popularity of translated material; also p. 47 for the defiantly nationalist manifesto of the young writers of the journal *Al-Fajr* ('The Dawn') who called for an 'adab qawmi', an authentically Egyptian literature.

²³⁷ See Louis Awad, *The Literature of Ideas in Egypt Part I* (Atlanta, Georgia: Scholars Press, 1986), Introduction, pp. 4 - 7; also Jacquemond on a series of articles written in the 1920s by Muhammad Hussein Haykal (1888 - 1956) calling for an 'adab al-qawmi', a 'national literature', but on the basis that "it would be enough to assimilate European literary forms and techniques and give these an indigenous content"; Jacquemond, *Conscience*, p. 111.

²³⁸ Hafez, *Genesis*, p. 103; see also Jacquemond, *Conscience*, 'Hegemony of the Realist Paradigm', pp. 88 - 98, and Moosa, *Origins*, pp. 91 - 92 on the lack of depth and complexity in the 'types' of character and plot prevalent in traditional Arabic folklore.

²³⁹ See Awad, *Literature of Ideas*, Introduction, p. 5, where he laments the fact that "issues that were and have been debated in the Arab world across two centuries are substantially the same issues now being debated [in 1986]."

²⁴⁰ Moosa, *Origins*, pp. 103 - 4: *Voyage en ballon*, by Yusuf Sarkis as *al-Rihla al-Jawwiya fi al-Markaba al-Hawaiyya* (Beirut, 1875); *Voyage au centre de la terre*, by Iskandar Ammun as *al-Rihla al-Ilmiyya fi Qalb al-Kurat al-'Ardiyya* (Alexandria, 1885); *Le Tour du Monde en 80 jours*, by Yusuf Assaf, as *al-Tawaf Hawl al-'Ard fi Thamanin Yawm* (Cairo, 1889) and *Voyage au pôle nord*, by Tawfiq Bubariya ibn Yusuf Bey as *al-Rihla al-Shatawiyya fi al-Jihat al-Thaljiyya* (Cairo, 1894) [sic].

some lines that he did not understand.²⁴¹ Moosa finds al-Mazini's translation of *The Time Machine* careless, because it "omits many words and terms for which suitable Arabic equivalents were readily available."²⁴² Egypt's Writing, Translation and Publication Committee also sponsored a translation of *The Food of the Gods* by H. G. Wells and Aldous Huxley's *Brave New World* during the inter-war period.²⁴³ Salama Musa, who championed the adoption of Western literature and science for the good of Egypt,²⁴⁴ fondly recalled meeting Wells, whom he called "undoubtedly the spiritual father of the new world" during his time in England, and credited Wells with inspiring him with his concept of world citizenship.²⁴⁵

The major Western SF texts from the late nineteenth and early twentieth century appear to have been translated relatively quickly, most probably due to Verne and Wells' popularity in their home countries having drawn their work to the translators' attention. In terms of the public appetite for science fiction, however, this did not translate into mass popularity in the Arab world, or inspire a host of Arab imitators. Moosa notes that, until the end of the Second World war, public demand from the Egyptian journals was mostly for "detective and mystery stories",²⁴⁶ which were the equivalent in popularity of the American SF pulps. Although Egypt enjoyed a vibrant journal culture during this period, the later editions of the 60s generation and Gallery 68 were more concerned with social realism²⁴⁷ than with a genre that would have been bracketed with the old-fashioned, backwards and folkloric-fantastical *mirabile* literature. The American pulps of the 1920s and 1930s were a discrete phenomenon that owed their popularity to the contemporary national preoccupation with indigenous technological advancement, especially space travel, that was absent in the Arab world and not particularly prominent in the UK either; Kingsley Amis noted in his 1962 science fiction

²⁴¹ Ibid., p. 117. The same problem affected early anonymous black market translations of Russian literature, although specialist Russian publishing houses did produce good versions: Vladimir Gopman (tr. Steven E. Merritt), Chapter "New Islands in the Gutenberg Ocean; The Problems of Publishing Science Fiction in Russia" in Gary Westfahl, George Slusser and Eric S. Rabkin (eds.), *Science Fiction and Market Realities* (Athens and London: University of Georgia Press, 1996), pp. 164 - 167. According to Alan Myers, much of the Russian SF magazine output was translated and plagiarised: quoted in John Griffiths, *Three Tomorrows: American, British and Soviet Science Fiction* (London: Macmillan, 1980), p. 45.

²⁴² Amongst other criticisms; see Moosa, *Origins*, p. 117.

²⁴³ Ibid., pp. 118 -119.

²⁴⁴ Kendall, *Literature, Journalism*, p. 42.

²⁴⁵ Salama Misa, *The Education of Salama Musa*, translated from the Arabic by L. O. Schuman (Leiden: E. J. Brill, 1961, pp. 76 - 77).

²⁴⁶ Moosa, *Origins*, p. 105.

²⁴⁷ Kendall, *Literature, Journalism*, p. 126.

survey *New Maps of Hell* that there were twenty-two American SF pulp magazines in 1941, but only two in Britain.²⁴⁸

Those in the Arab world who did take an interest in SF were aware of the early Western and Russian/Soviet writers; Talib Omran's 1989 study *Fī al-'Ilm wa al-Khayāl al-'Ilmī* (On Science and Science Fiction) includes a commentary on Tolstoy's *Aelita* and Wells' *The Time Machine*,²⁴⁹ while Russian SF features in discussions of the history of science fiction by the Arab critics Ghānim (1988), 'Azzām (1994), Khaḍr (1999) and Al-Sharuni (2000), possibly reflecting the greater influence of Soviet literature and cinema over American in Egypt in the 1950s and 1960s. Al-Sharuni mentions that Huxley's *Brave New World* and Orwell's *1984* had been translated into Arabic, but does not specify a date.²⁵⁰ The critic 'Iṣām Bāhī, writing in 1982, considered that European influence on Arabic SF was "undeniable".²⁵¹

This influence is apparent in the texts themselves. In No. 55 *Asra Al-Zaman* (Prisoners of Time) in the *Milaff al-Mustaqbal* series, Farouk makes one of his minor characters, a sheriff in the Victorian Texan town of Blackstone in one of his time-travel trilogies, mention Verne and Wells.²⁵² In No. 34 *Waḥsh Al-Muḥīt* (Sea Monster), the character Maḥmūd says that he feels as if they are in a Jules Verne novel, and Farouk provides a footnote about Verne and his novel *20,000 Leagues under the Sea*,²⁵³ while 'Azzām notes that Nihad Sherif read Verne, Wells, Conan Doyle, Benoit, Huxley and Rider Haggard during his formative years.²⁵⁴ In No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet), Nūr is attacked by a tiny advanced civilisation that has grown up on a replica planet earth, whereupon he compares them to the Lilliputians of Jonathan Swift's *Gulliver*.²⁵⁵

²⁴⁸ Kingsley Amis, *New Maps of Hell: A Survey of Science Fiction*. (London: The Science Fiction Book Club by arrangement with Victor Gollancz Ltd, 1962), p. 48.

²⁴⁹ Talib Omran, *Fī al-'Ilm wa al-Khayāl al-'Ilmī*, (Damascus Ministry of Culture: 1989), pp. 104 - 111.

²⁵⁰ Yusuf Al-Sharuni, *Al-Khayāl al-'Ilmī fī al-Adab al-'Arabī al-Mu'āsir* (Science Fiction in Contemporary Arabic Literature) (Cairo, Family Library, 2002), p. 189.

²⁵¹ 'Iṣām Bāhī, "Ruwāyat al-Khayāl al-'Ilmī wa Ru'an al-Mustaqbal." *Fuṣūl* vol. 2.2 (January to March 1982), p. 59.

²⁵² Farouk in No. 55 *Asra Al-Zaman* (Prisoners of Time), p. 57, p. 66 for a further footnote on Verne. He correctly identifies Wells' date of birth as 1866, and we are told on the first page that this Blackstone scene is set in 1880 – when Wells would indeed have been fourteen (though Wells' father's first name was Joseph, not George). His intention is obviously to show that Nūr's team inspired Wells' 1895 novel *The Time Machine*.

²⁵³ Farouk, No. 34 *Waḥsh Al-Muḥīt* (Sea Monster), p. 66.

²⁵⁴ 'Azzām, *Al-Khayāl al-'Ilmī*, p. 98.

²⁵⁵ Farouk, No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet), p. 115:

رَبِّمَا لَمْ تَكُن رِوَايَةً (جِيلْفَر) وَ رِحْلَاتِهِ بَيْنَ الْأَقْرَامِ وَ الْعَمَالِقَةِ مَجْرَدَ خِيَالٍ مِمَّنْوَلَفَهَا (جُونَاتَانِ سُوَيْفَت) ...

The narrator of Ahmed Khaled Towfik's *Ūtūbiyā* (Utopia) (2010) references Orwell and Wells when discussing the polarised state of this fictional futuristic Egyptian dystopia,²⁵⁶ while in Riḍwān's biography of Moustafa Mahmoud, guest contributor Dr Yūsuf Nūfal draws a line of inspiration from Verne to Mahmoud, suggesting that *Al-ʿAnkabūt* (The Spider) was written following Mahmoud's visit to the USA, and as a direct result of the influence of Verne.²⁵⁷

However, the authors Nihad Sherif and Mustapha Khilani told Tunisian SF scholar Kawthar Ayed during interviews that they had never read any Western SF,²⁵⁸ and the Tunisian SF writer Hechmi Khalladi lamented that:-

Il est dommage pour nos petits enfants tunisiens de voir passer l'année de la traduction (2008) sans qu'il y ait au moins deux ou trois de ces oeuvres traduites pour eux en arabe!²⁵⁹

Ahmed Khaled Towfik says of himself and other Arab authors that "there is one thing we all have in common, myself included: we have all depended on what we read in Western literature".²⁶⁰ More than half a century earlier, the editor of the journal *Ar-Risala* had claimed that Western influence was essential and beneficial:- "Our literature will never be a world literature if it is not impregnated by world literatures".²⁶¹

In Egypt, Yusuf Al-Sharuni wrote that Towfiq Al-Ḥakīm became interested in the idea of space travel after the first rocket launch in October 1957;²⁶² Al-Hakim's first science fiction works, *Fi-Sinnat Malayūn* (In the Year One Million) and *Al-Ikhtirā'a Al-Ajīb* (The Amazing Device), were published in 1958. Information about rockets and space travel was

²⁵⁶ Ahmed Khaled Towfik, *Ūtūbiā* (Utopia) (Doha: Bloomsbury Qatar Foundation Publishing, 2010), p. 78; Ahmed Khaled Towfik, *Ūtūbiā* (Utopia), tr. Chip Rossetti (Doha: Bloomsbury Qatar Foundation Publishing, 2011), p. 63.

²⁵⁷ Muhammad Riḍwān, *Muṣṭafa Mahmūd: Mishwār Al-ʿUmr* (Cairo: Dār Al-Maʿārif, 2010), pp. 136 – 137.

²⁵⁸ Kawthar Ayed "La Science Fiction Arabe" in *Géante Rouge* magazine, edition 15, Summer 2009, p. 26; their lack of direct acquaintance with the texts need not have precluded general awareness through reading of Western SF.

²⁵⁹ Hechmi Khalladi, "Littérature: les écrivains Tunisiens et la Science-fiction." *Géante Rouge* magazine, edition 15 (Summer 2009) pp. 34 - 35. (Article also published in *Le Temps*, a Tunisian newspaper, on 23 January 2009): Khalladi speculates on whether or not this could be due to a lack of specialist publishers, or to writers' lack of scientific knowledge.

²⁶⁰ Cheryl Morgan "Ahmed Khaled Towfik Interview". *The World SF Blog*, 11 June 2012. Permanent URL: <http://worldsf.wordpress.com/tag/ahmed-khaled-towfik/>. Accessed 29.2.16.

²⁶¹ Editorial to *Ar-Risāla*, 23 April 1945, quoted in Kendall, *Literature, Journalism*, p. 54.

²⁶² Al-Sharuni, *Al-Khayāl al-ʿIlmi*, p. 102.

internationally available via the news sources of the time; while there is no national monopoly on public interest in technology, a respected litterateur such as Al-Hakim would have had a powerful influence on the introduction and legitimisation of the modern genre, prevailing ever so slightly against the dominant culture of social realism in the novel.

Recent years have seen a renewed efflorescence of Arabic/English mass translation initiatives following the barren years described by Peter Clark in his 2000 article “Arabic Literature Unveiled: Challenges of Translation”.²⁶³ There have been several recent advances in Arabic/English translation, notably the Abu-Dhabi-based KALIMA project (launched in response to the damning UNDP Arab Human Development Report 2002), which has translated books on quantum theory, relativity and the human genome, but does not appear to have translated any SF texts.²⁶⁴ In Dubai, the Muhammad bin Rashid Foundation founded the ‘Oktob’, ‘Tarjem’ and ‘Turjuman’ programmes in 2008 to foster a pan-Arab literary renaissance by sponsoring and training writers and translators,²⁶⁵ although a preliminary search for science fiction published through this initiative did not yield any results, and it seems that this effort may have run into the sand.

Ahmed Khaled Towfik has said that he has translated many SF works from English into Arabic, as a result of which young people in the Arab world can now read Asimov, Bradbury and Clarke,²⁶⁶ although with regard to translation of SF from Arabic to English, the Bloomsbury-Qatar Foundation’s 2011 publication of Towfik’s *Utopia* is one of very few examples to date. The Palestinian poet Salma Khadra Jayyusi’s ‘PROTA’ - Project for the Translation of Arabic – has been active since 1980, but has not published any SF or SF-inflected works, other than the Palestinian Emil Habibi’s fantasy-inflected *Saeed the Ill-Fated Pessoptomist*.²⁶⁷

²⁶³ Peter Clark, “Arabic Literature Unveiled: Challenges of Translation.” University of Durham, Centre for Middle Eastern and Islamic Studies, *Durham Middle East Paper No. 63*, (January 2000).

²⁶⁴ <http://www.kalima.ae>, accessed 29.2.16; “Each year the Kalima project, an initiative of the Abu Dhabi Authority for Culture and Heritage, selects, translates and publishes in Arabic over 100 of the finest books of literature and science from foreign languages.”

²⁶⁵ <http://m.gulfnews.com/foundation-launches-programme-to-enhance-translation-in-arab-world-1.100224>, accessed 29.2.16.

²⁶⁶ Cheryl Morgan “Ahmed Khaled Towfik Interview”.

²⁶⁷ Roger Allen, “PROTA: The Project for the Translation of Arabic.” *Middle East Studies Association of North America Bulletin*, vol. 28, #2, December 1994, pp. 165 - 168.

As SF has not been a priority for translation initiatives in either direction, Arab SF authors have tentatively indicated a wish to begin their own: since 2007, three conferences specifically devoted to Arabic Science Fiction have been held in the Arab world (while in the UK the biennial Shubbak Arab arts festival in London²⁶⁸ has hosted sessions specifically devoted to Arabic language SF), and there is an active movement, led by the Syrian authors Talib Omran and Lina Kaylani, working with Kawthar Ayed, to promote the genre. The first of these, the “Lucian of Samosata” conference, was held in Damascus in June 2007, sponsored by the Syrian Ministry of Culture.²⁶⁹ The second, in April 2009, was hosted in Tunisia by ALECSO, where it was agreed to establish a writers’ database and a formal Arab SF writers’ association, support translation initiatives, and create a new prize for young writers.²⁷⁰ The third conference, held in Damascus in August 2009, emphasised the importance of SF in encouraging creative thinking among the Arab youth.²⁷¹ Ayed subsequently spoke at the August 2009 French *Géante Rouge* conference in Bellaing, France, where she announced the establishment of a new Arabic-language SF journal, *Al-Khayāl Al-’Ilmi*, edited by Talib Omran.

Writing in 2006, Achmed Khammas lamented:-

Even today, the only names mentioned in Arabic articles or interviews are Verne and Wells, perhaps also Orwell, Asimov or Sturgeon...Sales and marketing are generally inadequate - even within the individual Arab states - and awareness of what neighbouring countries are producing is generally modest, despite numerous book fairs. It is only since the advent of the Internet that an exchange between young writers has been taking place.²⁷²

²⁶⁸ <http://www.shubbak.co.uk/science-fiction-in-the-arab-world/Shubbak>; conference panel on Arabic Science Fiction, 25 July 2015, accessed 29.2.16.

²⁶⁹ Reviewed at www.concatenation.org/conrev/lucien.html (accessed 29.2.16), and in *Solaris* No. 164.

²⁷⁰ <https://worldsf.wordpress.com/2009/09/18/arabic-sf-prize-association-plans-announced/> accessed 29.2.16; also Csicsery-Ronay mentions the new SF and Fantasy Translation Awards in a 2012 article on global science fiction: Istvan Csicsery-Ronay, Jr. “What Do We Mean When We Say “Global Science Fiction”? Reflections on a New Nexus”. *Science Fiction Studies*, Vol. 39 (2012), p. 485.

²⁷¹ Yazan Al-Saadi, “Arabic Science Fiction: A Journey Into the Unknown”, *Al-Akhbar*, 3 June, 2012. Permanent URL: <http://english.al-akhbar.com/node/7995>, accessed 29.2.16.

²⁷² Khammas, “Almost Complete Lack”.

Ayed writes that, before the 1990s, no specialist SF imprint existed in the Arab world.²⁷³ The current leading genre authors are currently published by Dar el-Fikr in Damascus (Omran), better known for Islamic publications (<http://www.fikr.com>), and the Beirut-based Arab Scientific Publishers (Muḥammad al-‘Ashrī, whose novels are also published by Madbouly books of Cairo).²⁷⁴ Raji Inayat and Nabil Farouk are published by Dar el-Shurūq (Cairo, Beirut), and Al-Mu’assassa al-‘Arabiyya al-Hadītha (Cairo) respectively.

3.2 The Origins of Modern Arabic Science Fiction

The previous chapters briefly touched upon the debate over establishing a fixed point for the origin of Arabic SF and its treatment in the secondary literature as traceable from the fantastical folktales of the *Thousand and One Nights* and the utopian and mirabile literature of the mediaeval period, including al-Farabi’s *Al-Madina al-Fāḍila* (The Virtuous City), a tenth-century Utopia, and Ibn Tufayl’s *Hayy Ibn Yaqzān* (roughly translated as Life Awake-son), a twelfth-century tale of a boy growing up alone on an island to come to an independent realisation of the reality of God.

Some critics of SF regard the attempt to establish a classical pedigree for the genre as specious, considering it to be essentially a modern phenomenon,²⁷⁵ while others consider the ‘long history’ as far back as the classical period to be purely fantastical, with the “materialist idiom” beginning in 1634 with Kepler’s *Somnium*.²⁷⁶ Stableford summarises the dilemma over the true *fons et origo* succinctly: “Different concepts of what science fiction is or ought to be have led different writers to different points of origin.”²⁷⁷ The historian of science fiction’s choice of ur-text is defined by whether he considers fantastical journeys, or utopias, or texts incorporating scientific plot elements or proto-technology to be ‘SF’.

²⁷³ Ayed, “La Science Fiction Arabe”, p. 32.

²⁷⁴ <http://www.ashrynovels.blogspot.com>, accessed 29.2.16.

²⁷⁵ Brian Aldiss. *Billion Year Spree: The History of Science Fiction* (London: Corgi Books, 1975), pp. 2 - 3 for his thesis that the genre begins with Frankenstein and English romanticism; also Chapter 3 “Pilgrim Fathers: Lucian and all that”, pp. 64 - 90, for a discussion of early fantastical works from Lucian to Kepler, Swift, Poe, Defoe and Swift. Broderick derides these attempts, seeing the genre as essentially modern: Damien Broderick, *Reading by Starlight* (London: Routledge, 1995), p. 4. Delaney also considers such efforts “ridiculous”: Samuel R. Delaney, *The Jewel-Hinged Jaw: Notes on the Language of Science Fiction* (Revised Edition) (Middletown, CT: Wesleyan University Press, 2009, Introduction, p. xv.

²⁷⁶ Adam Roberts, *The History of Science Fiction* (London: Palgrave Macmillan, 2005), pp. 37 - 38.

²⁷⁷ Stableford, *Sociology*, p. 45.

For the Arab critics, the lineage usually begins with Sindbad, if not with Plato. Khammas mentions the *Thousand and One Nights*, al-Farabi, and the thirteenth-century Persian geographer al-Qazwini's *Awaj bin Anfāq*, before providing a useful starter bibliography.²⁷⁸ 'Azzām devotes the first chapter of his *Al-Khayāl al-'Ilmī fī al-Adab* (Science Fiction in Literature) to the *Nights* and Sindbad,²⁷⁹ and Ghānim dwells extensively on the classical, Babylonian and ancient Egyptian creation myths as well as Lucian's *Vera Historia*.²⁸⁰ Khaḍr views the stages that gave rise to Arabic SF as Greek, Islamic Arabic, Western and Egyptian, in that order, briefly considering the mediaeval precursors before situating her study as beginning in the 1960s (with a nod to Al-Hakim's contribution in the 1950s).²⁸¹

Sharuni, however, barely mentions the *mirabile* writers, stopping only briefly in a section on Utopias to position al-Farabi between Plato and Rabelais; reviewing Maḥmūd Qāsim's *Al-Khayāl al-'Ilmī Adab Al-Qurn Al-'Ashrīn* (Science Fiction, the Literature of the Twentieth Century) (1993), he describes Roland Lacourbe's three initial stages of SF development – the classical, the American thirties, and the magazine age, followed by a branching out into fantastical and political adaptations of the genre.²⁸² He does, however, like 'Azzām and Ghānim, devote several pages to the 'sea literature' of Sindbad as a legitimate ancestor of the modern genre, in his case, in the specific context of a discussion of Sherif's undersea SF romance *Sukkān al-'ālam ath-thānī* (Inhabitants of the Second World).²⁸³

There follows an apparent hiatus of six hundred years in production in the fantastical/utopian/science fictional mode, which ends for Moosa with the publication in 1885 of the first modern Arabic Utopia, the Syrian Francis Marrash's *Ghābat al-Haqq* (Forest of Truth),²⁸⁴ a humanist allegory and plea for social reform in the Arab world. Moosa also mentions in this context the Lebanese journalist Farah Anton's story *Al-Din wa Al-'Ilm wa al-Mal aw al-Mudun al-Thālath* (Faith, Science and Money, or, the Three Cities), published

²⁷⁸ This work is not listed in general reference sources on Al-Qazwini, other than in a circular reference to Khammas' essay "Almost Complete Lack"; his entry in the *Encyclopaedia of Arabic Literature* refers only to his cosmography and *mirabile* works (perhaps this alleged proto-SF texts is within the latter): Julie Meisami and Paul Starkey (eds.), *Encyclopaedia of Arabic Literature*, Vol. 2., (London and New York: Routledge, 1998), pp. 637 – 638.

²⁷⁹ Muḥammad 'Azzām, *Al-Khayāl al-'Ilmī*, pp. 14 - 25.

²⁸⁰ ' Ghānim, *Al-Ibd'ā al-fannī fī Qiṣaṣ al-khayāl al-'Ilmī* (PhD Dissertation, University of Ain Shams, Cairo, 1988), Chapter 2 "Muwāzaba bayn al-āsāṭīr wa al-hikāyāt wa al-qīṣaṣ al-'ilmī al-hadīth", pp. 49 – 59.

²⁸¹ Mahā Maẓlūm Khaḍr, *Binā' ruwāyat al-khayāl al-'ilmī fī al-adab al-miṣrī al-mu'āsir*, (PhD Dissertation, Cairo University, 1999), pp. 14 – 19.

²⁸² Al-Sharuni, *Al-Khayāl al-'Ilmi*, p. 288.

²⁸³ Al-Sharuni, *Al-Khayāl al-'Ilmi*, pp. 33 - 38.

²⁸⁴ Moosa, *Origins*, p. 186.

in Alexandria in 1903, a Utopian fiction discussing the relations between science, faith and money.²⁸⁵

For many critics, the first Arabic SF writer is considered to be Towfīq Al-Ḥakīm with his 1950 novel *Lū ‘Arif Al-Shabāb* (If The Young Men Knew), his 1957 play *Riḥlat illa al-Ghad* (Journey to Tomorrow) and 1958 plays *Fi-Sinnat Malayūn* (In The Year One Million) and *Al-Ikhtirā’a Al-Ajīb* (The Amazing Device), followed by his 1970 plays *Taqrīr Al-Qamr* (Moon Report), and *Shā’ar ‘ala Al-Qamr* (Poet on the Moon) (1971). Both Khammas and Sharuni mention the popular 1950s radio plays of Yusuf Ezzedine Issa, although these do not appear to be in print, and Sharuni says that many were published in an abridged format only.²⁸⁶ The 1960s saw the publication of Moustafa Mahmoud’s *Al-‘Ankabūt* (The Spider) (1964), *Al-Khorūj min al-tābūt* (Rising from the Coffin) (1965) and *Rajul taḥt al-Ṣifr* (Man Below Zero) (1966); the 1970s began with Yusuf al-Siba’i’s *Laystu Waḥdak* (You Are Not Alone) (1970), although the SF output in this decade was dominated by Nihad Sherif, beginning with 1973’s *Qāhir al-Zaman* (Conqueror of Time), *Raqm 4 Ya’omrikum* (Number 4 Commands You) (1974), and *Sukkān al-‘ālam ath-thānī* (Inhabitants of the Second World), continuing with *Ash-Shay* (The Thing) (1988) and *Ibn Al-Nujūm* (Son of the Stars) (1997).

Two Moroccan SF novels, *Iksīr al-Ḥiyāt* (Elixir of Life) by Mohammed Aziz al-Habbabi and *At-Taṭfān al-Azraq* (The Blue Flood) by ‘Abd Al-Salām Al-Baqqālī appeared in 1974 and 1979 respectively. Sharuni mentions two texts that are the sole SF output of their authors, Mohammad Hadīdī’s *Shakhs Ākher fī al-Mir’āt* (The Other Person in the Mirror) (1975) and *Hurūb illa al-Faḍa’* (Escape to Space) by Hussein Qadry (1981). Khammas places Talib Omran’s first SF novel, *Planet of Dreams*, in 1978, the same year as Ra’ūf Waṣfī’s *Space Invasion*; Omran has since published more than forty novels and collections of short stories. The prolific and popular author of the *Milaff al-Mustaqbal* (Future Files) series, Nabil Farouk, made his debut in 1979 with a short story, ‘The Prophecy’ that won him the Tanta Cultural Palace Prize, and in 1984 began the first of the *Future Files* novels; the series now numbers 150 novellas. Ṣabrī Mūsa’s *Al-Sayyid min Ḥuql al-Sabānkh* (Lord of the Spinach Field), a futuristic dystopia, was first published in 1982; Khammas mentions the first Iraqi SF novel *The Green Stain* (1984) by Kassem al-Khattat and the collections of short stories *She*

²⁸⁵ Ibid., p. 229.

²⁸⁶ Al-Sharuni, *Al-Khayāl al-‘Ilmī*, p. 92.

Pulsates with Life by Muwaffaq Uays Mahmud and *The Green Planet* by Ali Karim Kathem (both 1987).

In the 1990s, Khammas writes that

...the number of writers taking an interest in the genre grew, with the likes of Kassem Kassem in Lebanon, Mustafa al-Kailani in Tunisia, Abdallah Khalifa in Bahrain and Mussa Oald Ibno in Mauretania. The female Syrian writer Lina Kailani wrote forty texts, the Jordanian Sulaiman Mohammed al-Khalil dealt with cloning with a black humour all too seldom seen in Arabic literature and in Saudi Arabia, the short story collections "Ghosthunters" (1997) and "Yearning for the Stars" (2000) by Ashraf Faqih found their way into the book stores.²⁸⁷

The Kuwaiti mathematician and parliamentary candidate Tiba Al-Ibrahim published the first in her genetic/cryogenic dystopian trilogy, *The Pale Man*, in 1985, followed by its successors *The Multiple Man* and *The Extinction of Man* in 1992, the same year as the Egyptian geneticist 'Omayma Khafāji published her genetic engineering horror/SF text *Jarīmat Al-Ālam* (Crime of a World) in Moscow. The Egyptian geologist Muḥammad al-ʿAshrī published three SF novels from 2007 to 2009, and most recently the professor of tropical medicine and Egyptian medical horror and SF author Ahmed Khaled Towfik published *Ūtūbiyā* (Utopia) (2010), while Emirati writer Noura Noman released *Ajwān* (Gulfs) in 2013.

3.3 Conclusion

Factors such as literacy, pricing, prevailing literary preference and the possibility of censorship of progressive literatures, especially in countries where religious conservatism is a dominant social force, continue to shape access to literature in general in the Arab world, despite recent translation initiatives. Although the rate of adult literacy has improved since the 1960s, it is still worth considering Caiani's point that lack of literacy need not necessarily mean that writers are without agency;²⁸⁸ in the early twentieth century, it has been suggested that journals flourished in Egypt despite a high rate of illiteracy because of the impact of

²⁸⁷ Khammas, *Almost Complete Lack*.

²⁸⁸ Fabio Caiani, *Contemporary Arab Fiction: Innovation from Rama to Yalu* (London and New York: Routledge, 2007), p. 5.

orality in street culture.²⁸⁹ While oral literary café culture may now be obsolete, having been replaced to a large extent by internet communication, lending and samizdat publishing or copying of texts continues to allow a wider circulation than that afforded by publishing. However, the number of full-length novels in the genre remains very small, with perhaps only one or two new texts of note appearing each year.

Stableford has suggested that the role of certain influential individuals may be key to the development of a nation's SF corpus;²⁹⁰ in the USA, the magazine editor John W Campbell nurtured the talents of Asimov in the pulps, building on the efforts of *Amazing Stories* founder Hugo Gernsback; France and the UK produced Verne and Wells respectively, and in Russia the Strugatskys were pivotal figures in the development and popularisation of the genre. In the Arab world, Al-Hakim introduced literature with a science fictional bent in the modern era, with Mahmoud and Sherif's work popularising it in the 1960s and 1970s, and Talib Omran and Nabil Farouk's huge output in the 1980s in Syria and Egypt respectively consolidated SF as a visible, if not mainstream, part of the Arab literary field.

Ahmed Khaled Towfik commented in an interview with the (now defunct) World SF blog in June 2012 that:-

...science fiction is a relatively new innovation in Egypt. People there have only been writing novels for just over 100 years, starting with Francis Fathallah in Syria or Haikal in Egypt. Before that we had very little fantastical literature, except for the *Arabian Nights*. Sophisticated new inventions such as science fiction are very rare. Most people still are not aware of it, or don't understand it. It will take 50 to 100 years before it is respected.²⁹¹

The recent popularity of Towfik's best-selling Egyptian horror/SF novellas including *Ūtūbiyā* (Utopia), and public interest in Noman's debut *Ajwān* (Gulfs), as well as the determination of Ayed and Omran, among others, to promote the genre actively through their ALECSO initiative (which has unfortunately been delayed by current events in Syria) show that at this time of social and political turmoil, and increased public debate on the role of Islam in public

²⁸⁹ Kendall, *Literature, Journalism*, p. 10

²⁹⁰ Stableford, *Sociology*, p. 65.

²⁹¹ Cheryl Morgan "Ahmed Khaled Towfik Interview".

life, a literature of the future, and of alternative possibilities to the status quo, is now needed more urgently than ever.

Chapter 4.1: The Discourse on ‘Science Culture’ in the Arab World

4.1.1. Introduction

The word ‘science’ defines science fiction, in both English and Arabic. If we are to consider how the literature presents science, it is worth considering the broader cultural context; what scientific activity is conducted in a certain country or region will be governed not only by the available finance, materials and academic expertise, but also upon the local laws, religious scientific research was the progress of capitalism, which he viewed as an Occidental phenomenon;²⁹² the relatively unindustrialised East of the time did not have the same motivation. The perceived relative lack of scientific progress across the twenty-two countries of the Arabic-speaking world is frequently framed in public discourse as problematic; we might therefore expect to see this disparity, or concerns about it, reflected in the literature. In addition, as we have seen in the preceding chapters, Arab SF critics who also argue for the need for greater or faster scientific or technological development in the Arab world have suggested that the literature has, and should have, a didactic function; that it should be encouraged with the specific aim of stimulating the interest of a youthful readership in science – an idea that has also enjoyed some support in the West.²⁹³

Science fiction is primarily an entertainment vector, running the gamut in its scientific content from fiction with a faintly scientific or futuristic flavour to space opera with varying degrees of commitment to scientific accuracy.²⁹⁴ Yet besides the basic directive, maintenance and restorative functions performed by any work of fiction, as outlined by Stableford,²⁹⁵ SF holds a particular position that other literatures do not, as a literary response to the concept and realities of technological development.²⁹⁶ SF is an Enlightenment

²⁹² Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (London: Routledge, 1992), p. 24.

²⁹³ For a list of English texts written as part of a conscious effort to promote a scientific educational agenda, including those by Wells, Haldane and Bernal, see Patrick Parrinder (ed.). *Science Fiction: A Critical Guide* (London and New York: Longman, 1979), p. 76.

²⁹⁴ Examples of the former in the English genre would include Ray Bradbury’s *Fahrenheit 451*, set in a futuristic Earth where technology is adapted both for advanced surveillance and entertainment, and of the latter, physicist Alistair Reynolds’ *Revolution* novels or John M. Harrison’s noir-accented SF *Kefahuchi Tract* series.

²⁹⁵ Brian M. Stableford, *The Sociology of Science Fiction* (San Bernardino, CA: Borgo Press, 1987), Introduction, pp. 22 – 23.

²⁹⁶ See Broderick’s account of the lineage of SF, in particular on Asimov’s conviction that it was a modern literature that could not have been written before the nineteenth century, and the views of John W. Campbell, editor of 1930s US pulp SF magazine *Astounding Stories*, that “Science fiction is the literature of the Technological Era. It, unlike other literatures, assumes that change is the natural order of things, that there are

literature; its emphasis on science is the most important differential markers between SF and fantasy, with its frequently retrograde Tolkeinesque mediaeval settings and mythical beasts. SF has at least a notional rational basis, and a heuristic, potentially iconoclastic, ethos, meaning that it is able to interrogate social, political and religious *norms*; in the words of astrobiologist Mark Blake and his co-author, Anglican priest Neil Hook, “Science fiction began with the scientific revolution. It marks the paradigm shift of the old Universe into the new.”²⁹⁷

This basic association and alignment of SF with the cause of scientific progress opens up the potential for a consideration of what this literature says about the attitudes to science and technology embedded within the culture that produced that literature. While fully admitting the genre’s primary purpose as entertainment for the reader, or personal fulfilment or profit for the author, its scientific content is therefore of interest and merits examination in the next chapter.

What, then, are the main factors influencing the conduct of scientific research and technological development? Dinello suggests that defence is the major governing imperative, as the US military’s DARPA (Defense Advanced Research Projects Agency) originally funded many technologies;²⁹⁸ other common factors include greater agricultural productivity and clean water provision, greater ease of communication and trade, preservation and improvement of the environment, population control, public health, affordable energy, and national security and surveillance, or the desire to explore space.

All of these factors are predicated upon underlying values – cultural, social, religious or secular – that give permission for scientific activity according not only to need but also to the prevailing feelings about how and in what degree such needs should be addressed. Nasim Butt’s 1991 study *Science and Muslim Societies* quotes J. R. Ravetz’s belief that science is a socially conditioned activity, and that the science done and not done in a society reflects the

goals ahead larger than those we know. That the motto of the technological civilisation is true: ‘There must be a better way of doing this!’”. Quoted in Damien Broderick, *Reading by Starlight* (London: Routledge, 1995), p. 5.

²⁹⁷ Mark L. Blake and Neil Hook (eds.), *Different Engines: How Science Drives Fiction and Fiction Drives Science* (Basingstoke: Macmillan Science, 2008), p. 14.

²⁹⁸ Daniel Dinello, *Technophobia! Science fiction visions of post-human technology*. (Austin: University of Texas Press, 2006), p. 3.

values of its dominant institutions.²⁹⁹ Fear as well as aggression, and the wish to protect a perceived nation or faith, underpins the need for defence technology, and the desire to promote human wellbeing, at least for certain sections of the population, and to make a profit for the technology owner, underpins the engineering that provides us with clean water, plentiful food, instant communications, power, health, social security and family planning. Yet all of these beneficial services have sparked their own ethical debates, such as those about genetically modified crops, medical intervention in human reproduction and birth control, cross-species transplantation, communications hacking and environmentally friendly power supply sources.

All countries face the challenges of modernity, and the discourse around the benefits and drawbacks of scientific progress is almost universal. This public discourse on science versus religion, the rational versus the supernatural, is no less fiercely contested in the Arab world than it is in the West.

4.1.2 *Ānā al-Sharq*: Disparaging views of scientific progress in the Arab world

A discussion of the prevailing cultural values influencing scientific progress in the Arab world runs the risk of generalising across all of the Arabic-speaking countries, which are at very different levels of development, but a brief overview of the history of public opinion regarding the perception of scientific and technological achievement in this Arab space contested with religion for control, may perhaps be useful to set the literary response (framed as the SF corpus) in context. The discourse is not the sole preserve of polemicists, reactionaries and provocateurs, often inflamed by an apparent deep antipathy to Islam, conflated with the Arab world; there is also a body of criticism that is clearly frustrated with their perception of the Arab world as scientifically ‘backward’ and desirous of change for its benefit.³⁰⁰

Offensive criticism by Richard Dawkins, who tweeted in 2014 that “all the world’s Muslims have fewer Nobel Prizes than Trinity College, Cambridge. They did great things in the

²⁹⁹ Nasim Butt, *Science and Muslim Societies* (London: Grey Seal Books, 1991), pp. 31 - 32.

³⁰⁰ For example, “...the Arab “freedom deficit” results in a stultifying atmosphere where change, innovation, creativity, critical thinking, questioning, problem-solving and virtually any kind of non-conformity are all discouraged.” Brian Whitaker, *What’s Really Wrong with the Middle East* (London: Saqi Books, 2009 and 2011), p. 14.

Middle Ages, though.”,³⁰¹ and Bernard Lewis’ hand-wringing in his 2002 study *What Went Wrong?*,³⁰² follow Huntington’s ‘Clash of Civilisations’ paradigm in casting East and West in a rigid and essentialist oppositional binary, following Said’s account of Kissinger’s perception of the Arab world as being preserved in a pre-Newtonian state.³⁰³

Amin Al-Rihani’s poem *Ānā al-Sharq*, published in 1922, encapsulated the heart of the early debate in the language of Orientalism: “I am the Orient: I have philosophies, I have religions. Is there anyone who might buy them from me for aircraft?”³⁰⁴ Rasheed El-Enany uses this same quotation to conclude his 2006 study *Arab Representations of the Occident: East-West encounters in Arabic fiction*, to the effect that Arabs use technology but are not educated to understand it and become ‘parasitical consumers’;³⁰⁵ a criticism that could easily be made of the vast majority of today’s technology users worldwide. Saeed, the hero of Emil Habibi’s SF-inflected magical realist novel *The Secret Life of Saeed, the Ill-Fated Pessoptomist* (1974) accuses the Arabs, once pioneers of mathematics, empiricism and astronomy, of ‘surrendering their power of thought to others’, and alleging that they no longer act and then dream, but simply dream and carry on dreaming, concluding that “There must certainly be worlds other than ours, and better too.”³⁰⁶

Several popular English-language non-fiction publications have examined the concept of the Arab ‘Golden Age’ of science, during the period of the Abbasid Caliphate in Iraq (750-1258

³⁰¹ A statement that Richard Moss suggests “tells us more about the westernisation of science than a fictionalised intellectual retardation of the Islamic world.” Richard J. Moss, “Modern Fiction vs Modern Atheism” in Research English At Durham blog, 23 June 2014, <https://readdurhamenglish.wordpress.com/2014/06/23/modern-fiction-v-modern-atheism/>, Accessed 29.2.16.

³⁰² Refuted in Juan Cole’s review <http://electronicintifada.net/content/review-bernard-lewis-what-went-wrong-western-impact-and-middle-eastern-response/3441>, accessed 29.2.16.

³⁰³ Edward Said, *Orientalism* (First published Routledge & Kegan Paul Ltd (1978), Penguin, reprinted 2003), p. 47.

³⁰⁴ Quoted in Khalid Kishtainy, *Arab Political Humour* (London: Quartet Books, 1985), introducing his chapter on the intellectual resurgence in Egypt following the 1798 invasion. also quoted in Yusuf Al-Sharuni, *Al-Khayāl al-‘Ilmi fī Al-Adab Al-‘Arabī Al-Mu‘āsir* (Cairo: General Egyptian Book Organisation, 2000), p. 287.

³⁰⁵ Rasheed El-Enany, *Arab Representations of the Occident: East-West encounters in Arabic fiction* (London and New York: Routledge, 2006) p. 208. This sentiment is echoed by Khammas: “the Arab reader, to whom modern technology is something strange and foreign, technological containers which can be imported and used without any analysis of their actual content...Put in general terms, the Arab views the concept of a mobile telephone as entirely foreign until he actually uses one himself, after which it becomes something he takes entirely for granted. Is this not Allah’s will?!!” Achmed Khammas, “The Almost Complete Lack of the Element of ‘Futureness,’” tr. Don Mac Coitir. <http://www.heise.de/tp/artikel/23/23713/1.html>. Accessed 29.2.16.

³⁰⁶ Emil Habibi, *The Secret Life of Saeed, the Ill-Fated Pessoptomist* (tr. Salma Jayyusi and Trevor LeGassick) (New York: Interlink Books, 2002), p. 30.

AD)³⁰⁷, among them Jim Al-Khalili's 2010 *Pathfinders: The Golden Age of Arabic Science*, an account of this period the closing chapters of which consider the decline of science in the Arab world and an assessment of the current situation, in which he suggests that the Arab and Islamic world is relatively disengaged from scientific progress.³⁰⁸ Al-Khalili supports his hypothesis with statistics from UNESCO, the World Bank and an OIC committee, charting the Islamic world's proportionately five-fold lesser Research & Development spend in comparison with 'the developed world', fewer than ten technical professionals per 1,000 compared to a world average of forty, and a collective publication of 1% of the world's scientific papers, with a low citation rate.³⁰⁹ Writing in 2011, Hillel Ofey quoted *Nature* magazine's 2002 article identifying only three areas of excellence in science in the Islamic world – desalination, falconry and camel reproduction.³¹⁰

Al-Khalili quotes the 1987 indictment of one of the Islamic world's only two Nobel laureates (Physics, 1979), Pakistani Muslim Nobel Laureate Abdus Salam:

Of all civilisations on this planet, science is weakest in the lands of Islam. The dangers of this weakness cannot be over-emphasised since the honourable survival of a society depends directly on its science and technology...³¹¹

He draws on the earlier work of Pakistani nuclear physicist Pervez Hoodbhoy, whose 1991 *Islam and Science: Religious Orthodoxy and the Battle for Rationality* remarked upon Egyptian Muslim Brotherhood ideologue Sayyid Qutb's opposition to science³¹² and the

³⁰⁷ Publications such as Ehsan Mahsood's *Science and Islam: A History* (London: Icon Books, 2009); Jonathan Lyons' *The House of Wisdom: How the Arabs transformed Western Civilisation* (London: Bloomsbury Publishing PLC, 2010), and Michael Morgan's *Lost History: The Enduring Legacy of Muslim Scientists, Thinkers and Artists* (London: National Geographic Society, 2007) and the National Geographic Society's companion book to the 2010 exhibition at the London Science Museum (an exhibition that continues to travel around the world), *1001 Inventions: The Enduring Legacy of Muslim Civilisation* (London: National Geographic Society, 2008).

³⁰⁸ Jim Al-Khalili, *Pathfinders: The Golden Age of Arabic Science* (London: Penguin Books, 2012), p. 241: Chapter 16 "Science and Islam Today" caption quotation from Pervez Hoodbhoy: "With well over a billion Muslims and extensive material resources, why is the Islamic world disengaged from science and the process of creating new knowledge?"

³⁰⁹ *Ibid.*, pp. 243 - 244.

³¹⁰ Hillel Ofey "Why the Arabic World Turned Away from Science", *The New Atlantis*, Number 30, Winter 2011, pp. 3 – 23, published at <http://www.thenewatlantis.com/publications/why-the-arabic-world-turned-away-from-science> Accessed 29.2.16.

³¹¹ Al-Khalili, *Pathfinders*, p. 245.

³¹² Pervez Hoodbhoy, *Islam and Science: Religious Orthodoxy and the Battle for Rationality*, (London and New Jersey: Zed Books, 1991), p. 55.

disconnect between the Saudi love of technology and dislike of heuristic enquiry.³¹³ Hoodbhoy suggested that it was lack of Arab scientific development that allowed Arab territories to become dominated by the colonialist powers,³¹⁴ a conceptual position shared by C. P. Snow in his 'Two Cultures' lecture, during which he reminded Britain that it was its own lack of technological know-how that made the fortune of Prussian signals officer Siemens.³¹⁵

In 1996, political scientist Aaron Segal, writing in the *Middle East Quarterly*, asked 'Why does the Muslim world lag in science?', arguing that, far from the rationalist agenda of the Enlightenment being off-putting to a devout Muslim world, the Enlightenment's very detachment of science from Christianity actually made it more acceptable to Islam. He identifies import substitution as a factor removing the imperative for indigenous research and development:- "The prevailing mentality continues to be that of buying science and technology rather than producing it." Segal identifies demographic factors, language bars, poor educational systems, lack of research provision, emphasis on statism, import substitution, lack of professional societies, lack of resources, authoritarianism, lack of regional co-operation and government incompetence as the main contributing factors.³¹⁶

For Khaled Diab, writing in the *Guardian* in 2009, the reasons are ingrained in the culture of the education system:-

...the dominant patronage culture in academia, the shortage of research funding, the almost complete absence of private research, the difficulty of registering and protecting intellectual property, as well as the rote-based education system, may explain why more research is carried out by Arabs outside the region than inside it.³¹⁷

³¹³ Ibid., p. 122.

³¹⁴ Ibid., p. 3.

³¹⁵ C. P. Snow, *The Two Cultures* (Canto, Cambridge University Press, 1998), p. 24. In the UK, the Education Act was passed as a response to the unsettling technology that appeared in the Franco-Prussian wars; Alexei and Cory Panshin. *The World Behind the Hill: Science Fiction and the Quest for Transcendence* (Los Angeles: Jeremy P. Tarcher, 1989), p. 90.

³¹⁶ Aaron Segal, "Why Does the Muslim World Lag in Science?" *Middle East Quarterly*, June 1996, pp. 61 - 70.

³¹⁷ Khaled Diab, "The Truth about Arab Science", *The Guardian*, 24 July 2009, <http://www.theguardian.com/commentisfree/2009/jul/24/truth-about-arab-science>. Accessed 29.2.16. Diab's 2012 article chronicling the alleged surprise in Israel at the success of Saudi hackers who accessed Israeli state

Nidhal Guessoum, in his 2012 article “Does the Arab world (not) need basic science?” gives prominence in particular to the issue of Arab funding for ‘basic’ science research at the frontiers of knowledge where outcomes may be unknown, versus ‘applied’ research that is focussed on solving immediate socio-economic problems. He identifies a correlation between the relatively low Chinese Research & Development spend with the lack of Nobel Prizes won by Chinese nationals in science, and quotes the Arab Science and Technology Foundation and the Emirates Foundation as confirming that priority is given to applied, directed research that refines existing knowledge for a practical end, rather than theoretical, blue-sky research that has no short-term benefits but which might result in new or useful scientific discoveries in the long term.³¹⁸

There is a prevalent view that scientific enquiry in the Arab world has been in abeyance since the end of the Abbasid golden age in 1258; Hillel Ofey in her 2011 article “Why the Arab World Turned Away from Science” notes that President Obama paid tribute to this glorious past during his 2009 speech to Cairo’s students.³¹⁹ Al-Khalili suggests that excessive nostalgia does no favours to the cause of scientific progress in the Arab world, especially since ‘science’ at the time was “...no more than a kind of ‘proto-science’, crude attempts to make sense of the world blurred with theology and the occult”,³²⁰ although this is not entirely fair, as the much of the previous text is devoted to accounts of the early Abbasid scientists’ empirical methodology, his point is perhaps that too great a focus on the past risks embedding the view of Arab pre-eminence in science as a fossilised object, moribund and frozen in time.

Bernard Lewis’ 1993 dismissal of the Muslim world as having let the Renaissance, Reformation and Enlightenment pass it by³²¹ follows Kissinger’s view that frames this decline of scientific activity as the result of the Arab world not having experienced its own Enlightenment, having ‘missed’ that of the West, and figuring the secular aspects of the

computer systems identified this success this as a sign that the Orientalist stereotype was crumbling. Khaled Diab, “Hacking Away at Arab and Israeli stereotypes”, *The Guardian*, 19 January 2012.

See also Brian Whitaker’s account of an interview with a Cairo law student who describes the approach to university learning by rote: Whitaker, *What’s Really Wrong*, p. 17.

³¹⁸ Guessoum quotes the UNESCO Science Report of November 2010, which shows the relative paucity of research in the Arab world, compared to the world average (which only Jordan and Tunisia exceed). Nidhal Guessoum, “Does the Arab world (not) need basic science?” in *Nature Middle East*: Doi: 10.1038/nmiddleeast.2012.52 published online 8 April 2012. Accessed 29.2.16.

³¹⁹ Ofey, “Why the Arab World Turned Away from Science”.

³²⁰ Al-Khalili, *Pathfinders*, p. 241.

³²¹ Bernard Lewis, *Islam and the West* (New York: Oxford University Press, 1993), p. 183.

Western Enlightenment as fundamentally inimical to Islamic values. In a 2006 article in the *Socialist Review*, Neil Davidson suggested that mediaeval Islam was more accepting of scientific innovation than the socially static Christian empire, and that the oppositional element crept in much later, when the Arab world was re-introduced to scientific progress from countries where it flourished under Marxist regimes.³²² Davidson's view is that the Enlightenment was possible in Christian Europe, despite opposition from both Protestant and Catholic sources, precisely because of the oppositional energy generated; whereas, in the Islamic world, the fear of science as a challenge to Islamic religious authority was not active to the same degree, in part due to the lack of centralisation and hierarchy of religious authority.

4.1.3 Progress

In the modern period, the growth of the journals in Egypt played their part in the national project of modernity and the promotion of imported scientific progress, following the efforts of Al-Tahtawi's technical translators. Ya'qub Sarruf and Faris Nimr's journal *Al-Muqata'af*, founded in 1876, aimed to familiarise its Arab audience with Western thought, and in particular, science, as a means to progress.³²³ Hourani also cites Jurji Zaydan's *Al-Hilal* as active in this field, and credits Boutros Bustani's encyclopaedia as furthering the scientific cause.³²⁴ In 1938, Ṭaha Ḥussein's *The Future of Culture in Egypt* called for an imitation of European science, in particular for the avoidance of the fake mystique of a backward mystical East' (which for Ḥussein was the Far East),³²⁵ while in the 1930s the Egyptian Ahmed Hassan Zayyat, prolific translator and founder of the journal *Ar-Risāla*, made a plea in the April 1945 edition for a new translation bureau with a particular interest in the swift rendition of contemporary new scientific texts into Arabic.³²⁶

³²² Neil Davidson, "Islam and the Enlightenment", *Socialist Review*, March 2006. According to Hourani, Christian Arabs found the Western importation of science less alien, but were constrained in their approach to it by the authority of their churches. Albert Hourani, *A History of the Arab Peoples* (London: Faber & Faber, 1991), p. 307.

³²³ Elisabeth Kendall, *Literature, Journalism and the Avant-Garde*. London and New York: Routledge, 2006, p. 21.

³²⁴ Hourani, *A History*, pp. 303 -304.

³²⁵ Ṭaha Hussein, *The Future of Culture in Egypt*. (tr. Sidney Glazer), (Washington, DC: American Council of Learned Societies, 1944 edition), p. 21.

³²⁶ Matti Moosa, *The Origins of Modern Arabic Fiction (2nd edition)* (Boulder and London: Lynne Rienner, 1997), pp. 115 - 116.

While the Sharjah-based Arab Science and Technology Foundation for which *Nature* held high hopes in 2006³²⁷ appears to have been grossly underfunded for a supposedly pan-Arab enterprise,³²⁸ new institutions for the promotion of scientific research have recently been established; these include the Qatar Science and Technology Park, the King Abdullah University of Science and Technology in Saudi Arabia (KAUST) and the Synchrotron-light for Experimental Science and Application in the Middle East in Jordan (the English acronym echoing the Arabian Nights' magically-sealed mountain).³²⁹ SASTA, the Society for the Advancement of Science and Technology in the Arab World, was set up in 2011 as a San Diego-based non-profit network to link Arab expatriate researchers with their peers in the Arab world, facilitating training and collaboration.³³⁰ There is even talk of an Emirati space probe going to Mars.³³¹

The commitment and scale of these very recent investments in science education and development by the Arab world's wealthiest countries should be of reassurance to critics and worried well-wishers alike, and may be a source of respite for those who continue to be exasperated by the *Clash of Civilisations* paradigm. Christopher de Bellaigue, writing in *The Guardian*, demanded an end to calls for a 'Muslim Enlightenment' using short, character-based vignettes illustrating the Arab world's encounter with modernity; like Ofey, he calls for a greater understanding of the political and historical context of the Arab world's engagement with modernity in general, and for less criticism and more acceptance that any change will have to begin, for these political and historical reasons, by negotiation from the current, unequal status quo.³³²

³²⁷ <http://www.nature.com/nature/journal/v441/n7097/full/4411027a.html>. Accessed 29.2.16.

³²⁸ According to a short diagrammatic report produced at INSEAD by Abdulla Alnajjar, President of ASDF, while the Foundation has funded some research into cattle feed and the prevention of red algal bloom, the organisation's 'Angel' fund has only \$72m. Alnajjar identifies the reasons for the lack of innovation as lack of national policies and therefore funds; no link between industry and the universities, and the lack of an environment favourable to supporting entrepreneurs. <http://centres.insead.edu/innovation-policy/events/policy-breakfasts/documents/presentation-march-2013.pdf>. Accessed 29.2.16.

³²⁹ Al-Khalili, *Pathfinders*, pp. 248 - 249. KAUST was inaugurated in 2009, with a \$10.1 billion endowment. It attracted criticism from conservatives as the first mixed-gender campus, although the endeavour received the blessing of the Grand Mufti, who argued from that it was permissible according to Shariah: https://wikileaks.org/plusd/cables/09JEDDAH477_a.html. Accessed 29.2.16.

³³⁰ <http://www.sastaworld.com/>. Accessed 29.2.16.

³³¹ <http://www.wired.co.uk/news/archive/2014-07/16/arab-mission-to-mars>. Accessed 29.2.16. According to this report, the UAE has invested \$800m in an Abu-Dhabi based space centre since 2009, and \$5m in 'space technologies'.

³³² Christopher de Bellaigue, "Stop Calling for a Muslim Enlightenment", *The Guardian*, 15 February 2015. Accessed 29.2.16.

4.1.4 'Islamic Science'

Reactionary religious conservatism, and in particular the insistence in certain quarters of the Qur'ān as a source of scientific fact, is often figured as an obstacle to the development of heuristic, rational thinking necessary to scientific success. Abdus Salam, in the preface to Hoodbhoy's *Islam and Science*, writes scathingly of the 1977 attempts of scientists in Pakistan at "finding the chemical composition of jinns, and even...the extraction of energy from these fiery divine creatures so that Pakistan's energy problems could be solved."³³³ Al-Khalili concurs that this belief in the Qur'ān as a source of scientific knowledge has been detrimental to scientific progress in the Arab world,³³⁴ adding that those who see the Qur'ān as a textbook fear science because they consider it a secular construct of the West.³³⁵

Al-Khalili's discussion is part of his analysis of the effects of Mu'tazilism on scientific thought in the Abbasid empire;³³⁶ Ofey attributes the sudden decline of the heuristic scientific culture in the empire not chiefly to the 1258 conquest, but to the effects of the anti-rationalist Ash'ari reaction to the Mu'tazilism of the last Abbasid caliphs and the closure of the gates of *ijtihād*.³³⁷ Al-Khalili's analysis is by no means outdated; Hoodbhoy records that participants at a conference in Saudi Arabia in 1983 feared that the promotion of science causes "mu'tazilite tendencies",³³⁸ while David Cook charts the fear of exogenous heretical influence and its role in restricting scientific progress in his 2008 study of modern Islamic

³³³ Hoodbhoy, *Islam and Science*, preface, p. xiii; presumably following Qur'ān verses The Rock 15:27, "And the Djinn we created before, of intensely hot fire" or The Beneficent 55:15, "And He created the Djinn out of a smokeless flame of fire."

³³⁴ Al-Khalili, *Pathfinders*, p. 126.

³³⁵ *Ibid.*, p. 244 - 247. Al-Khalili mentions the 'Miracles of the Qur'ān' website as exemplifying this belief. This site links modern scientific discoveries and phenomena with Qur'ānic verses. One example is cloning (Surat al-Nisa', 119, which mentions Satan as commanding man to change Allah's creation). While some verses do address the related phenomenon suggested on the site, the connection between others is unclear; for example, the association of the appearance of birds in the sky (Surat al-Nahl, 79) can only be said to be connected with the discovery of aerodynamic principles in an extremely loose sense, and the verse quoted in support of the 'helio-centric system' (Surat al-Zamar, 5) does no such thing, while the Surat Mutaaffifin, 14 "what they have earned has rusted up in their hearts" does not predict the discovery of the oxidation of blood. <http://www.miraclesofthequran.com>. Accessed 29.2.16. Iraqi author Hassan Abdulrazzak, author of the play *Dhow Under the Sun* (2016) about an Arab state flooded as a result of global warming, has also written a satire on stem cell technology, but has stated that he has refused to take up requests to write about 'scientific miracles' in the Qur'ān.

<http://www.shubbak.co.uk/science-fiction-in-the-arab-world/Shubbak> (accessed 29.2.16); panel conversation with Hassan Abdulrazzak.

³³⁶ Al-Khalili, *Pathfinders*, p. 126.

³³⁷ Ofey, "Why the Arab World Turned Away from Science". Ofey suggests the Ash'ari reaction as a primary factor prior to 1258; the subsequent decline is further attributed to factors such as greater relative urbanisation of the empire, a single common language and flourishing trade routes.

³³⁸ Hoodbhoy, *Islam and Science*, p. 29.

apocalyptic literature; he also mentions the role of conspiracy theory, the belief that Zionists impose scientific and technical backwardness on the Arab world, and the general anti-scientific tone of this literature, which wishes destruction upon Western technology as it simultaneously envies it, and the belief that its success is a sign of the end times.³³⁹ For SF critic ‘Iṣām Bāhī, this association of scientific progress with Western decadence has exerted a negative effect on the Arab reaction to science fiction.³⁴⁰

The literalist scriptural approach overlaps with the concept of ‘Islamic science’, for which Butt tells us ten core values were identified at a Stockholm conference in 1981: following his belief in science as a socially conditioned activity, Butt’s concept is that the practice of science in the Islamic world should be based upon the principle of *Tawhīd* (oneness, an attribute of Allah) as the macroparadigm, and *Khilāfa* (caliphate, or the idea of stewardship) as the principle, promoting *‘Adl* (justice) for the public interest (*Istiṣlāḥ*).³⁴¹ Butt’s declared personal position as a Muslim is that the Qur’ān is true, but that at the same time it is not intended to be used as a source of scientific fact. Neither does he take the opposite position of supporting the “intellectual transplant” of Western science into Islamic society, casting Western science as a product of Western ideology and justifying his view of the Christian church as rejecting it.³⁴² Butt’s account of ‘Islamic science’ is somewhat contradictory. It clearly privileges revelation above reason in terms of its utter acceptance of Qur’ānic revelation, but does not endorse Maurice Bucaille’s defence of the ‘Qur’ānic science’ concept;³⁴³ rather, he wants Islamic, Qur’ānic values to dictate permission for what research should be done, and how it should be done.

4.1.5 The Didactic Function

If one of the purposes of science fiction, besides entertainment, is to foster a questioning attitude in the reader, it is not surprising to find that it is frowned upon in conservative cultures or authoritarian regimes, unless it is made clear that the science element does not threaten or oppose the tenets of the prevailing faith. Stableford suggests that in science

³³⁹David Cook, *Contemporary Muslim Apocalyptic Literature*, (Syracuse, New York: Syracuse University Press, 2008), p. 229.

³⁴⁰Bāhī, ‘Iṣām. “Ruwāyat al-Khayāl al-‘Ilmī wa Ru’an al-Mustaḳbal.” *Fuṣūl* vol. 2.2 (January to March 1982): p. 60.

³⁴¹Butt, *Science and Muslim Societies*, p. 43.

³⁴²Ibid., pp. 37 – 40.

³⁴³Ibid., pp. 38 – 39.

fiction, science comes to replace ideas formerly narratised by religion,³⁴⁴ and that during the SF golden age of Gernsback's *Astounding Stories* in the 1920s and 1930s, the leaps in technological development opened up new possibilities that competed with religion for the citizen's time, money and attention.³⁴⁵

In the context of the above contested views of technology vis-à-vis its importation in the modern period from the West, the presentation of science in SF becomes of interest, not least because of the discourse created around the idea of the didactic function of the literature. There is considerable enthusiasm for this concept among the Arab critics: Khammas relates that the influence of SF on legislation was mentioned at a 2005 cyber-law conference held by the Arab League in Cairo (although he does not give details, citing it only as proof of the growing acceptance of the literature in the Arab world), and produces quotations from scientists and interested parties in support of the importance of the cultural context in which SF is received, including the observation that "A scientific novel which is connected with phantasy cannot fall on fertile ground in an environment of preprepared answers and rejection of a culture of knowledge."³⁴⁶

The didactic function of SF is mentioned several times by the Arab SF critics. Şifāt Salāmah's 2005 newspaper article arguing for the necessity of SF in Arab curricula concludes with a supportive comment from Ahmed Zuwail, Nobel prize-winner and Professor of Chemistry and Physics at Caltech, crediting America's scientific progress to the encouragement of imaginative thinking.³⁴⁷ A generation earlier, the critics of the 1980s voiced their support for this approach: Yusuf Al-Sharuni observed "how rich countries flourish in both science and literature, and poorer countries in neither", lamenting the lack of

³⁴⁴ Brian Stableford, *The Sociology of Science Fiction* (San Bernardino, CA: Borgo Press, 1987), pp. 139 - 140.

³⁴⁵ Ibid., p. 152.

³⁴⁶ Khammas, *Almost Complete Lack*. Many of the speakers at the first Arab conference on SF, held in Damascus in 2007, appeared to take the view that SF's primary role was to interest readers in pursuing a scientific career for the benefit of the nation. Dr 'Issa Shamāss, "Al-Nadwa Al-Awla Li Kuttāb Al-Khayāl Al-'Ilmī fi al-Waṭan Al-'Arabī," *Magazine of Damascus University*, Issue 24, Vol.1, 2008 (being the Proceedings of the 2007 Conference on Arabic Science Fiction "Lucien of Samosata"). See also Istvan Csicsery-Ronay, Jr., "What Do We Mean When We Say "Global Science Fiction"? Reflections on a New Nexus," *Science Fiction Studies*, Vol. 39 (2012): p. 481, who alleges that interest in SF has been cultivated at a national level for 'soft power' purposes (although he admits that some of his evidence, particularly in the case of China, is anecdotal).

³⁴⁷ Şifāt Salāmah, "Tadrīs Al-Khayāl-Al-'Ilmī...ḍarurat mustaqbaliyāt wa laysa tarfān." Newspaper article in *Al-Sharq Al-Awsat*, Issue 9683, 2 July 2005.

Arab investment in scientific research, and adding that SF literature is one of the ways of encouraging science in the Arab world.³⁴⁸

In the 1960s Salama Musa in his autobiography called for more awareness of science among writers,³⁴⁹ seeing scientific thought as an ally in the defeat of reactionary traditionalism, and a path to independence.³⁵⁰ He also criticised the conflation in the Arabic lexica of his day of *ṭibb* and *sihr*, medicine and magic.³⁵¹

For Talib Omran, SF is part of science's first directive, being the service of mankind,³⁵² while 'Isām Bāhī demands that Arabic SF should have a practical function as a clarion call for the promotion of science in the Arab world.³⁵³

"أما نحن، فإن العلم بالنسبة لنا هو الخرج الوحيد من المأزق التاريخي الذي وقعنا فيه"

The fondness for the didactic function of SF has precedent too in the West, with particular emphasis on defence, Thomas Disch going so far as to call American SF "the unofficial PR agency of NASA".³⁵⁴ In the 1980s, a group of science fiction writers formed the Citizens Advisory Council on National Space policy, advising President Reagan on issues surrounding space exploration in language he could understand,³⁵⁵ and even in the early Golden Age of American SF, Hugo Gernsback considered it to be "essentially a directive medium", a literature designed to inspire readers to become scientists; the texts were a "sugar coating to introduce science."³⁵⁶ Patrick Moore's paper at the 1955 UNESCO conference supported this pragmatic approach, recommending that each nation set up a selection board for SF novels to

³⁴⁸ Yusuf Al-Sharuni, *Al-Khayāl al- 'Ilmi fī Al-Adab Al- 'Arabī Al-Mu'āsir*, pp. 287 – 288.

³⁴⁹ Salama Musa, *The Education of Salāma Mūsā* (translated from the Arabic by L. O. Schuman) (Leiden: E. J. Brill, 1961), p. 90.

³⁵⁰ Ibid., p. 33.

³⁵¹ Ibid., p. 80.

³⁵² Talib Omran, *Fī a-Ilm wa al-Khayāl al- 'Ilmī*. (Damascus: 1980.), p.103.

³⁵³ 'Isām Bāhī, "Ruwāyat al-Khayāl al- 'Ilmī wa Ru'an al-Mustaqbal." *Fuṣūl* vol. 2.2 (January to March 1982): pp. 57 - 65.

³⁵⁴ Thomas M. Disch, *The Dreams our Stuff is Made of: How Science Fiction Conquered the World* (New York: Free Press) 1998, p. 175.

³⁵⁵ Kathryn Cramer, Chapter 13 "Hard science fiction" in Edward James and Farah Mendlesohn (eds.), *The Cambridge Companion to Science Fiction* (Cambridge: Cambridge University Press, 2003), pp. 192 – 193.

³⁵⁶ Stableford, *Sociology*, pp. 48 - 49; although Alexei and Cory Panshin point out that for Gernsback's successor John W Campbell "...science fiction was neither sugar-coated education nor mere popular entertainment...It was the literary embodiment of science, man's most certain source of knowledge about the real universe". Alexei and Cory Panshin, *World Behind the Hill*, p. 266.

propagate knowledge;³⁵⁷ Parrinder suggests that this tactic was adopted to meet government recruitment needs for military scientists.³⁵⁸

These views were not held only by Western critics; Griffiths noted that Russian SF writers often openly wrote didactically, adding that their readership was much more accustomed to the popular reading of serious science,³⁵⁹ and Orbaugh attributes the 1879 Japanese translations of Verne's *Around the World in 80 Days* (1873) and *20,000 Leagues Under the Sea* (1869) to a deliberate policy of 'catching up' with Europe and America.³⁶⁰ Csicsery-Ronay, Jr. suggests (albeit on anecdotal evidence) that the Chinese authorities actively promoted SF after discovering that successful American engineers were often fans of the genre.³⁶¹

There is some support for this theory that, as Al-Sharuni suggests, fiction can become reality³⁶² (and in at least one case form a chain of inspiration; Wells' study under Huxley on evolution helped to inspire *The Time Machine*,³⁶³ and in turns Wells' fiction inspired physicist Leo Szilard)³⁶⁴. In 1944 the FBI searched the offices of *Amazing Stories*, the publisher of Cleve Cartmill's SF short story *The Atomic Bomb* because its contents revealed details of classified scientific research.³⁶⁵ ('Azzām mentions the case as an example of true predictiveness').³⁶⁶

³⁵⁷ Patrick Parrinder, Chapter 5 "Scientists in Science Fiction: Enlightenment and After", p. 57, in Rhys Garnett and R.J. Ellis (eds.). *Science Fiction Roots and Branches: Contemporary Critical Approaches* (London: Macmillan, 1990).

³⁵⁸ Ibid., p. 64.

³⁵⁹ John Griffiths, *Three Tomorrows: American, British and Soviet Science Fiction* (London: Macmillan, 1980), p. 20.

³⁶⁰ Sharalyn Orbaugh, Chapter 4, "The Genealogy of the Cyborg in Japanese Popular Culture" in Wong-Kin Yuen, Gary Westfahl and Amy Kit-sze Chan (eds). *World Weavers: Globalization, Science Fiction, and the Cybernetic Revolution* (Hong Kong: Hong Kong University Press, 2005), pp. 57 - 58.

³⁶¹ Csicsery-Ronay, Jr., "What Do We Mean", pp. 481 - 482.

³⁶² Al-Sharuni, *Al-Khayāl al-ʿIlmī fī al-Adab al-ʿArabī al-Muʿāsir*: "much of what is fiction is later proven by research", p. 17.

³⁶³ Charlotte Sleight, *Literature and Science* (Basingstoke: Palgrave Macmillan, 2011), p. 142.

³⁶⁴ <http://www.jewishvirtuallibrary.org/jsource/biography/Szilard.html>. Accessed 29.2.16.

³⁶⁵ Stableford, *Sociology*, p. 60. An account of the incident may also be found in Brake and Hook, *Different Engines*, p. 101, and H. Bruce Franklin, Chapter 10 "Eternally safe for democracy; the final solution for American science fiction", pp. 162 - 163; also in Griffiths, *Three Tomorrows*, p. 66.

³⁶⁶ Muḥammad ʿAzzām, *Al-Khayāl al-ʿIlmī fī al-Adab*. (Damascus, Dār Ṭalā Lil-Dirāsāt wa al-Tarjama wa al-Nashr: 1994), p. 8.

4.1.6 Conclusion

There is of course no ‘Arab science’ or ‘Islamic science’ – only a body of knowledge out of which certain groups claim a particular discoverer or inventor as one of their own. The idea of ‘Arab science’, as Al-Khalili points out, is meaningless, as science is just science;³⁶⁷ claiming a particular discovery or invention on behalf of an ethnicity, nationality, or in the case of ‘Islamic science’, religion, is a chauvinistic attempt at ownership, a territorial marking of ethnic or spiritual one-upmanship, at best justifiable only by that group’s specific and intentional investment to achieve that end result.

Notwithstanding the above, a discourse has arisen on the premise of a real or pretended bewilderment at the decline in scientific research in the Arab world since the Middle Ages, the subtext of which is at best patronising, at worst hawkish, as the success of the mediaeval Abbasid scientists was inextricably linked with the success and stability of their empire. Reactions to the 1798 Napoleonic invasion of Egypt, the world wars, the gradual retreat of colonialist powers and the rise of replacement authoritarian regimes, the Arab-Israeli conflict and alternative spending priorities following the sudden acquisition of oil wealth are only a few of the factors affecting the lack of investment in scientific research in the Arab world until very recent times. There is a consequent disconnect between the concerns expressed by Hoodbhoy and Butt in 1991, and some of the more recent discourse outlined in this chapter, but the perception of Arab scientific ‘backwardness’ persists, although it is increasingly contested. Khaled Diab’s 2012 article in *The Guardian*, “Hacking Away at Arab and Israeli Stereotypes”, which addressed the public perception of shock following the success of Arab hackers’ cyber-attacks on Israel, drew robust rebuttals of the premise from commentators,³⁶⁸ and in practical terms recent initiatives such as KAUST and SESAME are starting to challenge these old assumptions.

For some, the reactionary response extends even to questioning the need for the importing of Western technology, again due to its associations with secular Western society. The Egyptian economist and cultural commentator Galal Amin argues in *The Illusion of Progress in the Arab World* that the assumption that Western science will improve things is part of the *khawaga* (outsider) complex, adding that in any case its benefits are only enjoyed by the

³⁶⁷ Al-Khalili, *Pathfinders*, “A Note on the Term ‘Arabic Science’”, pp. xxv – xxix.

³⁶⁸ Khaled Diab, “Hacking Away at Arab and Israeli Stereotypes”, *The Guardian*, 19 January 2012.

elite.³⁶⁹ Amin's defence of Arab culture's suspicion of Western science, while deeply reactionary, at least seeks to appreciate the better aspects of that culture rather than dismissing it *in toto* as 'backwards'.

Fears of this kind, threatening to a conservative world-view, have some grounding in the avowed beliefs of secular critics such as Tatiana Chernyshova, who believed that the transition from religious to scientific mythology as a way of explaining the world is a prerequisite to social development.³⁷⁰ Csicsery-Ronay in response cautions that such a transition must be contextualised within the literary field of SF:

Space programs would not have been possible without the stitching of Copernican cosmology to narrative images of alien beings in undiscovered lands and visions of perfect spacefaring machines. The desires and anxieties crystallised in the playful myths of sf the ground for real scientific projects.³⁷¹

Cultural resistance to scientific progress is of course not unique to the Arab world. Every culture has its own experience of the encounter with the 'other', and resistance is a perennial response to that 'other'. In eighteenth-century England, Jonathan Swift made fun of scientists, naming his fictional science island Laputa – the “whore of science in the service of government”,³⁷² while Hoodbhoy raises the matter of the Catholic church's vehement opposition to science in the Middle Ages.³⁷³

In the twentieth century, resistance was not always grounded in religious dogma, although the level of moral and ethical concern formerly expressed through religion was elevated; Kingsley Amis in his study of Western SF, *New Maps of Hell*, observed that it is not technological breakdown per se that frightens us, but the moral and spiritual dangers of a

³⁶⁹ Galal Amin, *The Illusion of Progress in the Arab World* (Cairo and New York: The American University in Cairo Press, 2006), pp. 6 – 11. Amin, a traditionalist who fears the impact of such imports on the everyday fibre of Egyptian life, quotes the fictional events of Chinua Achebe's *Things Fall Apart* (1958) and Tayyib Saleh's *Season of Migration to the North* (1966) as examples of stories of traditional society crumbling when confronted with the West: *ibid.*, pp. 152 - 156. It is interesting that he cites the dystopian novels of Orwell and Huxley and their belief that technological advancement would be bad for civilisation in support of his anti-scientism stance (pp. 137 – 150).

³⁷⁰ Quoted in Istvan Csicsery-Ronay, *The Seven Beauties of Science Fiction* (Middletown, CT: Wesleyan University Press, 2008), pp. 116 – 118.

³⁷¹ *Ibid.*, p. 118.

³⁷² Darko Suvin, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* (New Haven, CT: Yale University Press, 1979), p. 109.

³⁷³ Hoodbhoy, *Islam and Science*, p. 22.

technologically-successful civilisation.³⁷⁴ Even Marxist ideology as implemented in Eastern Europe was alleged to be detrimental to scientific research,³⁷⁵ and the mass disgust and disillusionment with eugenic practices that followed the Second World War was only tempered with the advent of research on DNA as a tool for disease elimination.³⁷⁶

The relationship between Islam and science is of crucial importance in the Arab world, as a society where religion is a dominant force will exert control over what science is and is not done. Media stories that reinforce the stereotype of religious backwardness do not help; in February 2015 Saudi cleric Sheik Bandar al-Khaybari was filmed telling UAE students on the anniversary of Galileo's birth that the sun rotates around the earth; a Twitter hashtag briefly trended with derisory comments from Muslim students.³⁷⁷ The modern Christian fundamentalist world also produces abundant examples similar views, particularly in America, that attract equal derision.³⁷⁸

With regard to the influence of SF on a culture's success in scientific research as measured by the usual criteria - numbers of scientists per thousand, highly rated peer reviewed papers, patents taken out - the argument for didacticism is limited, as scientific research is an elite activity. Khammas' criticism that Arabs do not understand their technology cannot stand; most people do not know how their everyday technology works. Relatively few readers will possess the superior mathematical aptitude necessary for the pursuit of an advanced scientific career, and perhaps Gernsback's SF sugar pill only gives a superficial sweetness to the mundane reality of hours poring over equations or unrewarding, repetitive and poorly-paid laboratory work.

SF may fulfil this didactic desideratum for a very select few, but its real value for the majority will lie in its fundamental concern with difference and openness to new ideas not

³⁷⁴ Kingsley Amis, *New maps of hell: a survey of science fiction*. (London: The Science Fiction Book Club by arrangement with Victor Gollancz Ltd, 1962), p. 73.

³⁷⁵ Griffiths, *Three Tomorrows*, p. 61.

³⁷⁶ Dinello, *Technophobia!*, pp. 59, 192.

³⁷⁷ Comments on Twitter at hashtag #داعية_ينفي_دوران_الأرض: British press article in the *Daily Telegraph* at <http://www.telegraph.co.uk/news/worldnews/middleeast/saudi-arabia/11419428/Watch-Saudi-cleric-tells-students-Earth-does-not-rotate.html>. Comments on Twitter included @tkhaldi's "Did this idiot even go to school? I guess not (18 February 2015).

³⁷⁸ Examples include the 'young earth' creationists at Bob Jones University, South Carolina, or Patrick Henry College, Virginia, or Ken Ham's Creation Museum in Kentucky. See "Creationist Ken Ham Says Aliens Will Go To Hell So Let's Stop Looking For Them", Ed Mazza, *The Huffington Post*, 23 July 2014 at http://www.huffingtonpost.com/2014/07/22/ken-ham-aliens-go-to-hell_n_5608368.html

only about science but also about government, and even morality and religion. It is in the public sphere, rather than at the highest echelons of the technological elite, that SF is at its most powerful. The question of whether that difference is an improvement or otherwise is what strikes fire into the heart of the arguments about the advance of technology into all aspects of our lives in the modern world. In Arab society, the perception of science's contested position as a competitor with religion for answers to the big questions and its conflation with the secular rationalism associated with the Western Enlightenment, combined with historical resentment of the interference of old and new colonial and colonialist powers that currently control much of the world's most advanced technology, add fuel to this fire. The next chapter will examine how Arab SF literature, created from within this culture, offers a consideration of the differences brought about by scientific progress, and how this literature frames and imagines the interactions of science and technology with the modern Arab world.

Chapter 4.2: Scientific Themes in Arabic Science Fiction

4.2.1 Introduction

In the context of the broader discourse outlined in the previous chapter, this chapter will examine how science and technology are presented in the selected Arabic SF texts. Do these texts show a positive, negative or ambivalent attitude towards scientific enquiry and new technology? Are the origins of this technology important in the literature, and what attitudes do the texts display towards the indigenous Arab production of new technology? How important is science in the texts; can we ask, with Csicsery-Ronay Jr, if they deal mainly with challenges that are physical and technical, rather than social?³⁷⁹ Do they contain warnings against reliance on technology where it is felt that such reliance threatens their own cultural values, as Elizabeth Ginway found in her study of South American SF?³⁸⁰ Is there an authentically *Arab* dream of rationalism and progress apparent in the literature, and, if so, how does this dream interface with the popularly-invoked binary opposition between rationalism and religious belief in modern Arab society?

The SF critical sub-category ‘hard SF’ has been disputed as a somewhat artificial, publisher-driven construct, given that a scientific speculative content is a necessary element of the literature,³⁸¹ but generally ‘hard SF’ is considered to privilege factual scientific information more than other SF, placing a greater emphasis on verisimilitude, plausibility or didacticism, or a deliberate effort to create a convincing simulation of authenticity, often as a plot driver.³⁸² The Western sub-genre has a masculine and pragmatic tone, and a focus on war and weapons, with

A readership ... overwhelmingly male and middle-class, often adolescent or slightly pre-adolescent, and generally characterized by technocratic

³⁷⁹ Istvan Csicsery-Ronay, *The Seven Beauties of Science Fiction* (Middletown, CT: Wesleyan University Press, 2008), p. 86.

³⁸⁰ Elizabeth M Ginway, “The Body Politic in Brazilian Science Fiction: Implants and Cyborgs” in Donald M. Hassler and Clyde Wilcox (eds.), *New Boundaries in Political Science Fiction* (Columbia: University of South Carolina Press, 2008), pp. 206 – 209.

³⁸¹ Kathryn Cramer, “Hard science fiction”, Chapter 13 in Edward James and Farah Mendlesohn (eds.), *The Cambridge Companion to Science Fiction* (Cambridge: Cambridge University Press, 2003), pp. 186 - 187.

³⁸² *Ibid.*, p. 188; Cramer quotes David Hartwell’s enumeration of Hard SF characteristics, emphasising firstly the importance of the “beauty of scientific truth”. Cramer points out the limits of ‘hard SF’; not being a true scientific text; it must use literature to convey the ‘truth’, rather than equations.

identifications with academic science, commercial engineering, and the military.³⁸³

These ‘hard SF’ characteristics in English have moderated with time; the overtly militaristic tone of Heinlein and Asimov in the 1950s has been superseded by more speculative space and science-based novels such as those of Greg Egan, Alistair Reynolds and M. John Harrison; changes in society and gender roles since the 1950s, as much as new technological possibilities, have worked themselves out over time in the English language corpus.

‘Hard’ SF typically features space travel, futuristic warfare, robots and cyborgs, biological adaptations including immortality, cloning and artificial reproduction, cryonics, and the wilder shores of speculative fiction with time travel and alien invasion. This chapter examines the presentation of some of the most common themes of ‘hard’ SF, including space exploration and alien life, warfare, the transhumanist approach to the body and immortality, mind control, attitudes to science and scientists and the longing for a scientifically pre-eminent Arab world, as well as the tension between the rational and empirical and the supernatural that dominates many of the Arabic texts.

4.2.2 Space and Aliens

All writing on space travel prior to 1969 was speculative; the moon and outer space were fantastical loci in Cyrano de Bergerac, Verne and Wells, but in Arab SF only Al-Ḥakīm’s space plays and Moustafa Mahmoud’s scientific romances pre-date the moon landings. The main body of Arabic SF, beginning in the 1960s with Mahmoud’s three SF-inflected novellas, the 1970s scientific romances of Nihad Sherif and Aḥmed Abd Al-Salām Al-Baqqālī’s *At-Ṭūfān al-Azraq*, (The Blue Flood) and in the 1980s Ṣabrī Mūsā’s *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field) and the prolific output of Talib Omran and Nabil Farouk, was produced in the light of the public knowledge of and fascination with Russian and American domination of space travel.

³⁸³ Carl Freedman, *Critical Theory and Science Fiction* (Hanover, NH: Wesleyan University Press, 2000), p. 89; Freedman quotes sources providing data “to support these generalizations.” Thomas Disch quotes the “golden age of science fiction is twelve” truism, although adding that SF’s cultural penetration in the West means that nothing “science-fictional” is alien to modern twelve-year-olds. Thomas M. Disch, *The Dreams our Stuff is Made of: How Science Fiction Conquered the World* (New York: Free Press, 1998), p. 1.

The texts call the value of space travel into question, while presenting it as a future reality. A early example of this may be found in the science-fictional element of the alien presence in Emil Habibi's 1974 novel *The Secret Life of Saeed, the Ill-Fated Pessoptomist*, which is a metaphor for the narrator Saeed's madness. The transmitter of Saeed's letters is traced to a psychiatric hospital in Acre, and the alien's perspective is a narrative device that allows the author to muse on outer space as an alternative to the unbearable situation on Earth.³⁸⁴ In the totalitarian futuristic world of *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), space travel is ridiculed as impractical; spacemen had been sent out, thinking that they would return in one year, but the journey to one star was more than half a century ago. The spacemen are expected to return to earth in one hundred years, having aged only five years; the everyman hero Homo says that they will not return to ordinary life, or see their children; who is helped by this venture?³⁸⁵

Like Mahmoud's *Rajul taht al-Ṣifr* (Man Below Zero), a novel that raises exactly the same question about space travel, *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) also features a lecture scene which functions as an expository looking-glass for the reader into the future world, which has been re-built in zones contained under glass domes following a nuclear holocaust. In this scene, held in the Hanging Hall (”القاعة المعلقة”) in the sky, the ruling regime shows the audience a ‘Hudson Institute’ report with a time line of scientific achievements from 1987 to 2110, from the extraction of rare metals to make spaceships to Mars, to moon colonies, to travel to outer space, but notes that the attempt to colonise outer space has not yet been successful.³⁸⁶ The author seems to have included a short discussion of space travel in his futuristic world because this would be an expected reality in an age that sports many other stereotypically ‘futuristic’ features such as flying cars and near-universal surveillance, but he does not dwell upon it because the main interest of the novel is entirely earth-bound, being the human drama of Homo's decision regarding whether or not to stay in the safe domed world, or go outside to the wild and deformed natural world. The function of outer space is therefore made redundant in this novel; we are told in passing that actual space travel is a possibility, but it is unnecessary as the ‘outer space’ in the novel, a dangerous and exotic terra nova, is actually only just beyond the glass domes, on Earth itself.

³⁸⁴ Emil Habibi, *The Secret Life of Saeed, the Ill-Fated Pessoptomist* (tr. Salma Jayyusi and Trevor LeGassick) (New York: Interlink Books, 2002), pp. 20 – 30.

³⁸⁵ Ṣabrī Mūsā, *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) (Cairo: Al-Hiyat al-Maṣriya al-‘Āma lil-Kutāb, 1987, first published 1982), p. 60.

³⁸⁶ Ibid., pp. 145 – 146.

Space travel is also a benign reality for the population of 26th century Libya in Yūsuf al-Quwīrī's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), a novel in diary form originally serialised in the Libyan newspaper Al-Maydan from 1966 to 1968; a coast on Mars is named 'Great Sirtis' ("سيرتس الأكبر"),³⁸⁷ giving a Libyan name to a feature on a colonised planet, although we are told that mankind has not reached all the planets of the solar system.³⁸⁸

Space travel is also a reality in the futuristic Egypt of Farouk's *Milaff al-Mustaqbal*, although its use is always confined to a military elite; it is not a mode of civilian or recreational travel. Farouk's patriotic Egyptian heroes regard space travel as a marker of scientific advancement and superiority; in No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), the Egyptian Head of Intelligence shows the protagonist Nūr a picture of the first Arab rocket to be launched, *Al-Fāteḥ No. 1*, which is powered by a new, secret fuel made from amino acids that has been developed in Egypt (and is "about 9 times better than atomic fuel").³⁸⁹ Spaceships in the *Milaff* are often patriotically named; in No. 48 *Sijn Al-Qamr* (Moon Prison), the ship is 'Nāṣer 9',³⁹⁰ while in No. 66 *Al-Shams Al-Zarqā'* (The Blue Sun) the Egyptian rocket Nāṣer 20 is to be launched on an expedition to the Sun.³⁹¹ In No. 50 *Al-Uṣṭūra* (The Myth) the rocket is simply 'Egypt 3'.³⁹²

The first thirty *Milaff* novellas are set mostly on Earth, but at the end of No. 30 *Al-Nār Al-Bārīda* (The Cold Fire), following a diplomatic imbroglio with the Israelis, the Chief transfers Nūr to the Space Police as a punishment, and thereafter the conflicts that propel each narrative are more often oriented towards space, in particular, threats from space, which is a theatre of war for the rest of the series. From the trilogy beginning with No. 37 *Al-Samā' Al-Muḥlāma* (The Dark Sky), alien Blue Men present a threat to Earth; their planet's atmosphere having been destroyed in a war, they seek to block the sun's light with huge brown lenses in order to make the Earth habitable for their race. In No. 67 *Shaiṭān Al-Faḍā'*

³⁸⁷ Yūsuf al-Quwīrī, *Min mufakkirat Rajul lam yūlad* (Diary of a Man Not Yet Born), Benghazi: Dār Al-Rūwād, 1997, p. 27.

³⁸⁸ Ibid., p. 31.

³⁸⁹ Farouk, No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), p. 118.

³⁹⁰ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison), p. 19.

³⁹¹ Farouk, No. 66 *Al-Shams Al-Zarqā'* (The Blue Sun), p. 5.

³⁹² Farouk, No. 50 *Al-Uṣṭūra* (The Myth), p. 11.

(Satan of Space), an evil alien intelligence manifests itself through animal bodysnatching, and is defeated, but is resurrected and reprises its routine in No. 68 *'Uqūl Al-Sharr* (Evil Minds).

As the series progresses, interplanetary travel by the team becomes normalised; in No. 65 *Ābwāb Al-Mawūt* (Doors of Death), they visit the planet Jūdān. The narrative here has the feel of a video-game, with its onslaught of monsters, otherworldly ballistic missiles and dinosaurs that the team must defeat, while the tenth planet that appears in the solar system in No. 50 *Al-Uṣṭūra* (The Myth) abounds with monsters from Greek mythology. In No. 69 *Ālam Al-Akhar* (The Other World), a duplicate Earth harbours a space virus, and in No. 96 *Budhūr Al-Sharr* (Seeds of Evil), the eponymous seeds of evil come from Plāntūriyā, a planet similar to Mars, whose inhabitants are plants.

The titles in the 'Occupation' series Nos 76 – 80,³⁹³ which explore a period of occupation of the Earth by aliens, clearly indicate an allegorical relationship with Palestine (discussed further in Chapter 5), charting the struggle between two alien powers, the Jalūrālans and the Arghurānians, over the Earth, that began with the arrival of the alien Būdūn in No. 58 *M'araka Al-Kūwākib* (Battle of the Planets).

Space in the *Milaff* is almost always populated by hostile aliens, although they are always ultimately mastered by the Egyptian hero Nūr, for whom all space falls under the *khilāfah* of God. Space is also mainly a theatre of war and a source of alien threat, but is also presented explicitly as a source of wonder at God's creation. On the first page of No. 86 *Al-Imbirāṭūr* (The Emperor), Nūr is on Earth looking out into space:

امتدت النجوم بلا نهاية، في الفضاء الواسع الرحب، و تألقت كمصابيح صغيرة، في سطح من المخمل -
الأسود الناعم. تناثرت فيه الشمس و الكواكب و الأقمار، و كل في فلكه يسبح، في دقة نظام، و رتبة،
يحكمها ينظمها الخالق (عز و جل)

The stars stretched out endlessly in faraway, fearful space, and sparkled like small lamps on a soft black velvet background. Across it were scattered all the suns and

³⁹³ Farouk, No. 76 *Al-Iḥtilāl* (The Occupation), No. 77 *Al-Moqāwama* (The Resistance), No. 78 *Al-Ṣirā'* (The Struggle), No. 79 *Al-Tuhaddi* (The Threat) and No. 80 *Al-Naṣr* (The Victory).

planets and moons, each swimming in its orbit and in its precise order, as arranged, commanded and ordered by the Creator, to him be majesty and glory.³⁹⁴

That familiar theme, the SF ‘sense of wonder’ at the scale of the universe, and in particular God’s universe, is also found in Mahmoud’s *Rajul taht al-Şifr* (Man Below Zero); in the expository lecture scene when the reader learns of the earth’s recent history of wars and the rebuilding of a technologically-advanced civilisation in the year 2067. A religious student speaks of the eventual end of the universe, when all matter will melt into a dough, then compress into the size of a fist, into the primordial matters with which creation began (the word *khalaq* implying, of course, a Creator):³⁹⁵

...و تذوب و تتحول إلى عجينة متضاغطة مثل قبضة اليد من المادة الأولية التي بدأ الخلق.

Dr Shāhīn enthuses about the possibility of travelling into space without a body, but the disembodiment process, a kind of translocation or teleportation, cannot be reversed, as his body will be permanently transformed into waves. He rhapsodises about the beauty of the universe as he travels in disembodied form to Jupiter, Saturn and Sirius, to Orion and the constellations, but he also sees aliens in space, firstly saying that they are waves and electrical charges, then that from his point of view, that they are “creatures and beings with features, forms and personality” (مخلوقات و كائنات ذات ملامح و تقاطيع و شخصية); he also observes methane-breathing creatures on Jupiter’s moon Titan.³⁹⁶

There are moments of lyricism during this rapturous journey: he speaks of the orange glow charged with ions surrounding Jupiter like a Van Allen’s belt, streams of helium, scatterings of frozen carbon dioxide, and a strong smell of ammonium, and a belt of rays gleaming in the night air like a cascade of emeralds and precious jewels:³⁹⁷

أحزمة برتقالية مكهربة من الأيونات تشبه أحزمة (فان ألن)...الهليوم السائل...و جزراً متناثرة من ثلج ثانى أكسيد الكربون...و رائحته نوحادرية شديدة...و حزم الإشعاع تلمع في جو الليل مثل أنهار من الزمرد و الياقوت.

³⁹⁴ Farouk, No. 86 *Al-Imbirātūr* (The Emperor), p. 5.

³⁹⁵ Moustafa Mahmoud, *Rajul taht al-Şifr* (Man Below Zero) (Cairo: Dār Akhbār Al-Yawm, 2008), p. 23.

³⁹⁶ Ibid., p. 80.

³⁹⁷ Ibid., p. 81.

Although Shāhīn disappears into the sun at the end, presumably forever, he passes Venus and comments that it could be made habitable for human beings. His boss on Earth, Ocampo, immediately orders that the bomb devised by the Turkish scientist ‘Aşmat Āghā be fired into Venus’ atmosphere, creating the potential for colonisation. The treacherous assistant ‘Abd Al-Karīm’s expiatory sacrifice in travelling in frozen form to Jupiter enables that planet to be seeded with protoplasm from which life can form, but the author is pessimistic as to the outcome; the seeding of Jupiter will begin the birth of new pains on that distant planet (“لتبدأ... مخاض ألام جديدة على الكوكب النائي...”).³⁹⁸

Aliens are, of course, fundamental embodiments of the ‘Other’, and their literary function as allegories of othering (racial, sexual and social) are discussed in Chapter 5. However, they also function in the most basic sense simply as an intelligent alternative to humanity that fulfils either the function of technologically advanced enemy, closely matched in order to give human protagonists a fair fight (as in Wells’ *War of the Worlds*), but ultimately inferior, or, alternatively, they can be benevolent, wistful embodiments of a connecting voice in the void (such as the friendly aliens of Carl Sagan’s *Contact*).

The *Milaff* aliens are humanoid, technologically-advanced master-races with monstrous appearances, mainly signalled through different skin colours, their appearances replete with the familiar visual signifiers of the Western pulps: the Arghurānians have red skin, blue veins and eyes like serpents, and the aliens of the trilogy Nos 37 – 39 are the ‘Blue Men’ of the planet Zorq. A few individual aliens are given personality: the Arghurānian Būdūn, and the alien-robot S-18, both of whom become Nūr’s ally and friend. No. 58 *M’araka Al-Kūwākib* (Battle of the Planets) opens with an aerial dogfight between Nūr and Būdūn, who is conducting reconnaissance prior to an invasion by the planet Arghurān, which is destroying whole towns with its purple ray weapon.

Būdūn is introduced as an enemy, who tells the team that at first he wanted to conquer Earth, but when he saw that Earth people had similar eyes to his race, he wanted to study them, a plot device that both flatters Earth’s inhabitants as special, and saves them from immediate destruction, allowing the team time to act. Būdūn’s civilisation kills millions, but he spares

³⁹⁸ Ibid., p. 101.

the team as they are “braver and cleverer than the rest.”³⁹⁹ Būdūn comes to respects Nūr’s intelligence in particular (having examined his brain telepathically, and returning the favour by granting Nūr knowledge of Arghurān). He challenges Nūr to an advanced holographic video-battle game to win control of the Earth, and although Nūr loses the game, he does not really lose face, as he has lost to Arghurān’s champion, who is from a more advanced civilisation.

Būdūn is genuinely surprised when Nūr asks him why he has invaded their planet, telling him that it is normal for the strong to invade the weak. Nūr describes a society where people share, but Būdūn scorns this notion, pointing out that this is not the reality on Earth. Peace is for the weak, he says, and Arghurān knows only war and victory.⁴⁰⁰ Būdūn reappears in No. 96 *Budhūr Al-Sharr* (Seeds of Evil) as a rescuer, and in No. 97 *Lahīb Al-Kūwākib* (Planets Ablaze) Nūr asks his chief for two years’ leave to keep his promise to Būdūn by returning to Arghurān to help liberate it.

The alien Blue Men who appear in No. 37 *Al-Samā’ Al-Muḏlama* (The Dark Sky) enchant Mushīra and Dr Ḥijāzi and the rest of the team using telepathic mind control, but are unable to subdue the mentally strong Nūr. They plan to build an array of lenses that will reflect the sun’s rays back and ensure that the earth’s skies are darkened to make it habitable for their race. The trilogy ends in the following novella, No. 38 *Min Warā’ Al-Nujūm* (From Behind the Stars), with the Blue Men defeated, but with Ḥijāzi and Ramzy seriously injured, Maḥmūd having a nervous breakdown and Nūr in a coma; the downbeat conclusion adds depth and tension to the series, showing that the team’s victories are not all easily won, and rounding out Nūr’s saintly superman persona with vulnerability and humanity.

Aliens regularly feature in the remainder of the series, chiefly in the Jalūrīāl/Arghurān conflict, and the occasional lone invader such as the rather comical ‘Satan of Space’ alien that possesses animals and men, feeding on electricity. One alien, the ‘Lord of the Universe’ in No. 49 *Ghazw Al-‘Arḍ* (Invasion of the Earth) turns out to be a British villain, a former RAF war hero called Philip Arthur, who encountered real aliens from the planet Zandūr during a wartime sortie, and persuaded them to give him a spaceship with the secret aim of conquering the Earth. Alien races are also revealed to be living inside the earth; in No. 90 *Ru’b Al-*

³⁹⁹ Farouk, No. 58 *Ma’raka Al-Kūwākib* (Battle of the Planets), p. 43.

⁴⁰⁰ Ibid., pp. 103 - 104.

A'māq (Terror of the Deep) and No. 91 *Ḍidd Al-Zaman* (Against Time) their headquarters is revealed as being under the sea off Aghadir in Morocco. Conversely, another alien, the vegetable-man Fārid in No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) has been masquerading as human for thousands of years, seeding Earth quietly with his advanced knowledge; he tells the team that he came to Earth 900,000 years ago from a planet 3,000 light years away, Zaranzaks (“whose name spoken sounds like music”). He was an assistant to Imhotep, Leonardo da Vinci, Napoleon and Julius Caesar, living for 500 years in the Tassili caves in Algeria (real caves famous for their paintings that appear in paranormal literature as the putative work of aliens).⁴⁰¹

The BEMs (Bug Eyed Monsters) beloved of the early Western pulps appear relatively rarely (and when they do, the cover illustrations are very much in the Western 1930s pulp tradition), but are not always genuine monsters; in No. 34 *Waḥsh Al-Muḥīt* (Sea Monster) the reader is firstly led to believe that the team’s captors are Atlanteans who created the *Damār* (Destroyer) using advanced genetic engineering techniques, combining the genes of a blue whale and a dinosaur (and in Farouk’s world, this would be a possible explanation), but the *Damār* turns out to be not a cryptozoological relict, but a cleverly-disguised Israeli submarine. The language used to describe its first appearance is strongly reminiscent of the typical *A Thousand and One Nights* description of a djinn or ifrit, with a contemporary twist, comparing the size of one eye to a big car: جسم ضخم، أخضر اللون... عينان لامعتان، يبلغ حجم الواحدة: 402 منها سيارة كبيرة...

This choice of simile tethers this text to the fantastical heritage of the *Thousand and One Nights*, an appropriate device for Farouk, who blends the scientific and the fantastical seamlessly throughout the series. Real BEMs include the *Pandolāriūs* of No. 48 *Sijn Al-Qamr* (Moon Prison) that makes off with a screaming Salwa, the vampires of No. 40 *‘Alāmāt Al-Khawf* (Signs of Fear), the green giant on the moon in No. 95 *Al-Qūwat Al-Sawdā’* (The Black Force), the two-skulled, three-eyed Tibetan-temple dwelling creature in No. 146 *Al-Buq’a Al-Muḥlama* (The Dark Spot), and the mythological genetically-modified creatures of the tenth planet in No. 50 *Al-Uṣṭūra* (The Myth). A similar nod to the *Nights* is found in Al-Baqqālī’s *At-Ṭūfān al-Azraq* (The Blue Flood), when the rogue supercomputer

⁴⁰¹ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 121.

⁴⁰² Farouk, No. 34 *Waḥsh Al-Muḥīt* (Sea Monster), p. 11.

SANCTUARY dies and takes on the physical appearance of a monster,⁴⁰³ and when the hero Dr Nādir feels welcomed to the hidden Jebel Judi science city by his fellow scientists; he feels “as if Jebel Judi were not just a science city made out of copper, without a heart or emotion”⁴⁰⁴ (a reference to the Copper City of the *Thousand and One Nights*).

The team investigate flying saucers seen in the Egyptian desert in No. 28 *Al-Nahr Al-Moqaddas* (The Sacred River), which turn out to be surveillance craft used by a scientifically advanced occulted group of ancient Egyptians surviving inside a mountain. David Cook’s 2008 study *Contemporary Muslim Apocalyptic Literature* tells us that the Egyptian conspiracy theorist Hisham Kamal ‘Abd Al-Hamid tried to prove that flying saucers are piloted by demons; Cook suggests that the fantasy of advanced alien technology, even when used by the Jews, is a comfort to the Muslim apocalyptists, suggesting to them that Western technology is not the best;⁴⁰⁵ at least Farouk’s flying saucers are piloted by aboriginal Egyptians. The aliens of the *Milaff* are always freakish and threatening, in the mode of classic early Western SF pulp, and their main function is to show that human – and in particular, Egyptian – technology and bravery are sufficient to render them ultimately harmless; a comforting fantasy.

4.2.3 War Machines

Weapons production as the main driver of technological development is well documented in Western SF,⁴⁰⁶ with Katherine Hayles observing a particular fetish for military hardware⁴⁰⁷ (although Gregory Benford finds that British SF is less mechanical and more elegiac in tone

⁴⁰³ Ahmed Abd Al-Salām Al-Baqqālī, *At-Ṭūfān al-Azraq* (The Blue Flood), USA (sic): Hasan Yahya Publishers, 2012, p.143: SANCTUARY manifests as a human face, its appearance becoming monstrous and djinn-like in its death throes, growing fangs and claws.

⁴⁰⁴ Ibid., p. 95: “فشعر...أن جبل الجودي ليس مدينة علمية نحاسية لا قلب لها ولا عاطفة”. ‘Azzām finds Omran’s hero in *Al-‘Ābirūn Khalf as-Shams* (Those Who Cross Behind the Sun) (1979) as a pilot caught in a storm who crashed into a secret Arab science city. ‘Azzām, *Al-Khayāl al-‘Ilmī*, pp. 83 – 85.

⁴⁰⁵ David Cook, *Contemporary Muslim Apocalyptic Literature* (New York: Syracuse University Press, 2008), pp. 81 – 82, 117.

⁴⁰⁶ For example, “...the contemporary fascination with hard science tends to be as sociological as it is epistemological, and this not least because of the massive cooptation of pure science in the United States by business and defense research of all kinds.” Fredric Jameson, *Archaeologies of the Future: the desire for Utopia and other Science Fictions* (London: Verso Books, 2007), pp. 340 – 341.

⁴⁰⁷ Cramer, “Hard Science Fiction” in James and Mendlesohn, *Cambridge Companion*, pp. 189 – 190: “fetishism...love of hardware for its own sake, especially military hardware”.

than the triumphalist engineer hero-dramas of the American pulps).⁴⁰⁸ For Darko Suvin, war is itself the main purpose of technology, economically useful in appropriating others' resources and sustaining a burden of debt and taxes on the populace,⁴⁰⁹ while Philip John Davies finds that SF is particularly suited to analysing conflict and war because it combines hard science with politics, and because of its preoccupation with defence.⁴¹⁰

Considered in their historical context, many SF texts address contemporary anxieties reflecting the public perceptions of the available information about technology developed for war. Adam Roberts notes that SF "war stories" burgeoned in the period before the First World War,⁴¹¹ and Robert Matthew's analysis of Japanese SF finds that a spate of war novels followed the Russo-Japanese war of 1904-5,⁴¹² while the Panshin brothers read the American *Buck Rogers* series of the 1950s as a response to the perceived 'yellow peril' of the Han Chinese.⁴¹³

In the *Milaff* series, Nūr's military intelligence team are always on a war footing, whether against a domestic, international or intergalactic enemy; although mind control is a weapon in the *Milaff* universe, physical conflict is always a threat, requiring the use of weapons. These are most commonly guns; shooting is very frequent, with ray guns particularly favoured by Farouk, although weapons of mass destruction are also deployed.

The author is careful to hedge the use of such weapons in children's books around with the appropriate moral agonising; at the end of No. 58 *Ma'araka Al-Kūwākib* (Battle of the Planets), when the team first encounter the aliens of Arghurān, the Chief prays for forgiveness from God for his use of the 'proton bomb'.⁴¹⁴

⁴⁰⁸ Gregory Benford, Chapter "In the Wake of the Wave: The British Science Fiction Market", in Gary Westfahl, George Slusser and Eric S. Rabkin (eds.), *Science Fiction and Market Realities* (Athens and London: University of Georgia Press, 1996), p. 151.

⁴⁰⁹ Darko Suvin, "Of Starship Troopers and Refuseniks" in Hassler and Wilcox, *New Boundaries*, pp. 116 – 117. Also see Doug Davis, "Science Fiction Narratives of Mass Destruction and the Politics of National Security" on how defence planners use storification to bolster spending and justify military actions, *ibid.*, pp. 145 – 156.

⁴¹⁰ Philip John Davies, Chapter 1 "Science fiction and conflict" in Philip John Davies, ed., *Science Fiction, Social Conflict and War* (Manchester University Press, Manchester and New York, 1990), Introduction, p. 2.

⁴¹¹ The British Prime Minister Gladstone condemned George Chesney's *Battle of Dorking* (1871), which depicted Britain being invaded by Germans, as alarmist: Adam Roberts, *The History of Science Fiction*. (London: Palgrave Macmillan, 2005), pp. 116 – 117.

⁴¹² Robert Matthew, *Japanese Science Fiction: A View of a Changing Society* (London: Routledge and Nissan Institute of Japanese Studies, University of Oxford, 1989), p. 11.

⁴¹³ Alexei and Cory Panshin, *The World Behind the Hill: Science Fiction and the Quest for Transcendence* (Los Angeles: Jeremy P. Tarcher, 1989), p. 215.

⁴¹⁴ "و ليرحمنا الله جميعاً" Farouk, No. 58 *Ma'araka Al-Kūwākib* (Battle of the Planets), p. 105.

in No. 80 *Al-Naṣr* (Victory), realising the destructive power of the weapon on Būdūn's ship, Nashwa asks Salwa if the weapon can be used, and Salwa replies that it can, but only suicidally, as a last resort (“كوسيلة انتحارية أخيرة”): it works by sucking all the energy from every living thing on the planet, and they wonder if it is worth sacrificing the earth to save all the other planets in the universe that the Jalūrālans want to dominate.⁴¹⁵ In the subsequent book, No. 81 *Ramz Al-Qūwwa* (Symbol of Strength), when the weapon is detonated, the explosion is described as “like a thousand suns” (“كألف شمس”), echoing Oppenheimer's description of the atomic bomb.

After the *Occupation* series, there is no let-up; in No. 87 *Nuṣf Ālī* (Half-Machine), new team member Nāzim notes that there is now a new war, a war for power sources, development and the power to destroy other nations,⁴¹⁶ while in No. 115 *Al-'Adūw Al-Khāriq* (The Supernatural Enemy), he tells us that biological warfare is now banned, only kept in case any needed to make a vaccine, although states continued to conduct secret research.⁴¹⁷

A Third World War is the vector for the destruction of the old world and creation of a new, though imperfect, Utopia in Mahmoud's *Rajul taḥt al-Ṣifr* (Man Below Zero); originally a war between Russia and America (the novel was written during the Cold War), it lasted only three days, during which millions were killed and floods and electrical storms ensued as the result of the use of atomic weapons causing the loss of the ionosphere.⁴¹⁸ The concept of Al-Baqqālī's *At-Ṭūfān al-Azraq* (The Blue Flood) is based upon the retreat of scientists from the world after the Second World War to keep the secrets of science safe if there should be a third World War; one of the conflicts in the book is the rogue computer SANCTUARY's wish to take up the scientists' third option for the future of mankind, a deadly flood of blue rays that will wipe out humanity, allowing the scientists to build a new, better world.⁴¹⁹

Weapons of mass destruction are described in retrospect in the futuristic dystopia of Ṣabrī Mūsa's *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field). We learn during the lecture in the Hanging Hall that there was a third ‘electronic war’

⁴¹⁵ Farouk, No. 80 *Al-Naṣr* (Victory), p. 64.

⁴¹⁶ Farouk, No. 87 *Nuṣf Ālī* (Half-Machine), p. 26.

⁴¹⁷ Farouk, No. 115 *Al-'Adūw Al-Khāriq* (The Supernatural Enemy), pp. 7 – 8.

⁴¹⁸ Mahmoud, *Rajul taḥt al-Ṣifr* (Man Below Zero), p. 11.

⁴¹⁹ Al-Baqqālī, *At-Ṭūfān al-Azraq* (The Blue Flood), p. 77.

after the two World Wars;⁴²⁰ these were spy satellites carrying bombs and rocket stations with nuclear warheads...also neutron and ray bombs that were very deadly, as well as more sophisticated precision weapons, “ethylene oxide” weapons and rockets fuelled with gases or atomic weapons. Sound and light weapons created painful tinnitus that killed, and pulsed light flashes with infra-red rays that penetrated eyelids, causing narcolepsy, coma, tremors and epilepsy, as well as light waves that boiled people;⁴²¹ these are explained as the result of the application of scientific theories (تطبيقات لعدد كبير من النظريات العلمية). The audience ask each other what would have happened if the ancestors had used their scientific theories in the service of manufacturing or agriculture, exploiting the desert and the oceans, instead of destruction. Later, it is revealed that they used rain-making technology to cause floods that drowned their enemies;⁴²² the author is using the retrospective view as a warning, and a comment on the brutality of death in war.

In contrast, the drama of war in Ahmed Khaled Towfik’s *Ūtūbiyā* (Utopia) is viewed by the jaded youthful Egyptian elite as an enviable pastime, almost as a desideratum by the hero. The novel is set in the very near future, and the context is an Egypt in a state of extreme social division, rather than a post-holocaust wasteland, although the masses live in poverty with very few resources in such wretched conditions that there is little practical difference. Although he professes no interest even in the history of Egypt’s wars with Israel, the spoilt and violent nameless anti-hero actively longs for the excitement of war as an antidote to the anomie of his luxurious life as one of the elite.⁴²³ The Vietnam war is a repeated motif throughout the novel, which opens with the anti-hero contemplating a poster on his bedroom wall for Oliver Stone’s 1986 Vietnam war film *Platoon*, envying the hero’s death in battle, although his lack of interest in real history is confirmed later when he confuses the Vietnam and Iraq wars when talking with his American security guard.⁴²⁴ At least he is consistent in his longing for battle; when the angry masses swarm across the desert towards the elite’s

⁴²⁰ Mūsa, *Al-Sayyid*, pp. 155 -156.

⁴²¹ Ibid., pp. 141 - 142.

⁴²² Ibid., p. 148.

⁴²³ Ahmed Khaled Towfik, *Ūtūbiyā* (Utopia) (Doha: Bloomsbury Qatar Foundation Publishing, 2010), p. 12; Ahmed Khaled Towfik, *Utopia*, tr. Chip Rossetti (Doha: Bloomsbury Qatar Foundation Publishing, 2011), p. 6.

⁴²⁴ Ibid., p. 28; English version p. 21; also at p. 94 (English version p. 78) when the hero Gaber describes the rescue of other Utopians who tried to hunt Others as trophies in the slums of Cairo, he contemptuously suggests that the Utopians were behaving as though they were acting in a Hollywood Vietnam film; although they were in real danger, their venture into the land of the Others was a game, and they were eventually rescued by their American Marine guards.

citadel at the end, he recalls his hero from *Platoon* one last time while facing them on the city walls.

In Yūsuf al-Quwīrī's *Min mufakkirah Rajul lam yūlad*, set in 2565, social and scientific change has occurred without the destruction of atomic war, but the narrator says that Einstein's atomic theories are now being used for peaceful purposes, to provide abundant energy through nuclear fission.⁴²⁵ Weapons of war have literally been melted down into tractors and machines (the modern equivalent of swords into ploughshares), and the narrator's daughter Suham objects to being named after a weapon ('arrow'), choosing instead to re-name herself Salwa ('compassion').⁴²⁶ Such a scenario is typical of this text, which mostly avoids controversy and presents the future as an improved new world where technology has been harnessed with the main aim of making citizens' lives more pleasant.

4.2.4 Robots

In *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field), the classic SF theme of manufactured robot intelligence achieving self-awareness and becoming a threat is superseded by another theme, that of such machines becoming god-like. Robots are introduced as benign, meek household servants; in the conversation parlours, where the regime permit the workers to relax, drink and talk under surveillance, the talkers refer to them simply as machines that serve them, and do dangerous tasks and housework:⁴²⁷

تلك الروبوتات التى تقوم على خدمتنا... بكل الآمال الجطرة... أعمال النظافة والشئون المنزلية...

Here, a transliterated version of the English word 'robot' is used, but elsewhere variations on the common Arabic designation *إنسان آلى* is used; for example, when the attendant at the interrogation centre is sending Homo back home, he asks Layla if they have a "خدام آلى", a machine servant. Their human attendant complains when their robot does not allow him to issue the command to send the robot car: "Those damned machine servants! You can never deceive them...!"⁴²⁸

تلك الآلات الخادمة اللعينة, لا يمكن أبداً خداعها...

⁴²⁵ Al-Quwīrī, *Min mufakkirah*, p. 18.

⁴²⁶ Ibid., pp. 30 - 31.

⁴²⁷ Mūsa, *Al-Sayyid*, p. 65.

⁴²⁸ Ibid., pp. 97 - 98.

While the domestic robot is used by Layla to rearrange and redecorate the house,⁴²⁹ the rebel technocrat Barūf is the first to warn Homo of the machines' real power. Homo at first denies this to himself, observing that:

They had bodies made of metal, and had no use of necessity except for human progress and their electronic minds fed upon only the information given, so how could these machines achieve dominance?⁴³⁰

انها اجسام من المعدن, لا تملك نفعا ولا ضرا ما يتقدم الانسان و يغذى عقولها الالكترونية بالمعلومات المطلوبة, فكيف يمكن لهذه الآلات أن تمتلك اسيادة؟

The rebel Barūf overturns this assumption of unquestioning machine servility in his speech in the Hanging Hall, when the technocrat overlords compete with the rebels to convince the audience to vote for an even more technocratic, totalitarian mode of government. Barūf's argument is that the robots' intelligence has covertly advanced, making them self-aware and dangerous, that machines experience boredom, or enjoy attention, like humans, and the modern electronic minds can now undertake tasks that formerly only the specialised human brain could perform. He concludes that, when the machine that man invented has reached this level, exceeding all bounds in every respect, becoming strange, and also equal...it can work with us, or against us.⁴³¹

فالعقول الالكترونية الحديثة تقوم بالكثير من الوظائف التي كانت من اختصاص الدماغ الانيساني, كالادراك و تصحيح الخطا ذاتيا, و التكيف, و التعلم, و الاستدلال...و عندما تبلغ الآلة التي يخلقها الانسان, هذا الاسراف فى الكمال, فانها تصبح غريبة عنه, و معادلة له... و تستطيع أن تعمل له أو ضده؟!

However, the audience is eventually swayed by the regime's alternative representation of human progress and votes against Barūf's plea for a return to nature.

When Homo stumbles upon a room in the Hanging Hall filled with banks of computers, he realised that he is in the Temple of the Electronic Minds. Machine intelligence takes on a

⁴²⁹ Ibid., p. 120.

⁴³⁰ Ibid., p. 88.

⁴³¹ Ibid., p. 165.

sacerdotal function, as the machine shows Homo the history of his world, including millions of years of evolution, the purpose of which is for the machine to show that robots are simply another step in the evolutionary process. Tellingly, the exhausted mortal Homo sleeps through most of this exegesis, dreaming of running naked through a primeval wood with Layla and their children, while the Iron Mind (العقل الحديدي) asks him:

Why do you fear robots, Homo, and resist them, when men made them? Without the making of the robot, you would remain on the ladder of development, sliding back down to the ground to your nearest relatives, the mammals?!⁴³²

فلماذا تخشى الآلة يا هومو و تتراجع أمامها، و قد صرت انسانا بالأداة و الآلة...و بغير الأداة و الآلة،
لبقيت على درج التطور متلصف بالأرض الى جوار أقربائك من الثدييات!؟

As Homo's final decision to return to the outer world is shown to be ultimately almost suicidal at the end of the book, his nostalgia is presented as naïve and futile. While the machines' future world is efficient and controlled, and enables the human race to continue, it is also highly authoritarian; rather pessimistically, the author appears to be implying that machine rule is inevitable, and during the Hanging Hall debate, it is shown to be something that the human audience can easily be persuaded to accept. For Mūsa, the machines of the future have already one; presented with an easy, drugged, controlled life, or a life of struggle in a post-apocalyptic wilderness, people will choose the easy option. The political implications of this choice are discussed in the next chapter.

Robots do not feature in the near-future 2020 dystopia of Ahmed Khaled Towfik's *Ūtūbiyā* (Utopia), as, while the elite of the Utopian enclave enjoy every modern luxury, the novel's focus is not on the technical aspects of the post-oil future, but on the social and psychological effects of the rise of a new non-oil dependent West on an already socially-polarised Egypt. However, the language used by the Utopian anti-hero to describe the dispossessed Others who inhabit the slums of Cairo recalls the mechanical construction of automata, so toughened have they become by their debased life: "If their stomachs are made of stone, then their livers are made of steel, and their optic nerves are electric cables."⁴³³

⁴³² Ibid., p. 190.

⁴³³ Towfik, *Ūtūbiyā* (Utopia), p. 45; English version, p. 37.

لو كانت معدتهم من حجر فكبدهم من فولاذ وعصبيهم البصري كابل كهرباء...

The familiar fear of the Other, characterised in metaphor as a robot uprising, is reprised unexpectedly in Utopia when the downtrodden, toughened Others rise up against their pampered masters at the end. This single metaphor, a nod to the novel's SF inflections by a prolific Egyptian SF author and translator, is a clever inversion of the common trope where robots are part of the elite; here, the poor Others are so debased and dehumanised by their subjugation that they become inorganic and machine-like, rushing over the desert in their hordes to storm the Utopian citadel. They are not technologically privileged or advanced, but they are as pitiless as the machine nightmares of traditional robot SF horror.

Robots appear relatively infrequently in the *Milaff*, although a recurring character, S-18, is both a robot and a revenant from ancient Egypt (being the product of Atlantean technology instrumental in defeating the Hyksos). S-18 is an enemy who becomes an ally, so filling the stereotypical SF position of robot-amanuensis to the team. The villains are normally rogue scientists, spies from hostile nations, aliens or monsters, rather than mechanical devices; in this sense, the *Milaff* are much friendlier towards technology itself, as within these narratives the team's ingenuity can always harness them for good purposes.

Farouk introduces S-18 in No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter), opening with the excavation of a tomb bearing a carving of a green-faced man carrying what appears to be a laser gun, and an inscription claiming that the occupant is from Atlantis. The mummy wakes up, shoots the archaeologists and heads for Cairo, killing everyone in Tahrir Square before shooting down three Egyptian Air Force planes and disappearing into the Sahara. Nūr only succeeds in stopping the robot by working out that it is responding to last command it was given when fighting the Hyksos – to kill everyone in its path, and manages to reprogram it by borrowing a Pharaonic commander's costume, chariot and Aryus from the Cairo museum and giving it new orders in the ancient Egyptian language, having read the hieroglyphic inscriptions on S-18's tomb and composed a countermand.⁴³⁴ From this time on, S-18 is on the team's side, and he appears again in No. 49 *Ghazw Al-'Arḍ* (Invasion of the Earth) as the fifth team member. Nūr has shown his superiority by gaining power over the machine, at the

⁴³⁴ Farouk, No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter), p. 112.

same time showing that this technology was also known by the ancient Egyptians. The robot ‘threat’ is quashed and the machine becomes subservient.

The omniscient third-person narrator following S-18’s adventures in this book tells us that he does not know however that the civilisation that created him was destroyed, buried under the ocean by an ion-proton bomb. His batteries will last another three centuries at least, his metal body ten, and he was made in a galaxy a hundred light years away.⁴³⁵ This information places the robot’s origins as Atlantean-alien (later verified in subsequent books), and therefore makes Nūr’s achievement in winning him over all the more impressive.

S-18 returns to rescue Nūr from a plane crash in No. 80 *Al-Naṣr* (Victory), and returns with him to fight the Jalūrīāl invasion, but in No. 81 *Ramz Al-Qūwwa* (Symbol of Strength) he malfunctions and runs amok due to having a disk with a demonic inscription stored inside him (which he eventually he throws into the heart of the sun in an apparent suicide mission in No. 83 *Arḍ Al-‘Adam* (The Non-Existent World)). He appears again in No. 90 *Ru‘b Al-A‘māq* (Terror of the Deep) in response to Nūr’s cry for help in No. 92 *Al-Riḥlat Al-Rahība* (The Terrible Voyage) upon learning that S-18 vanished into another dimension where he was worshipped as a god. Nūr visits Atlantis in No. 92 with S-18 to obtain a drug to cure his daughter Nashwa from a condition that has reversed her ageing process, with S-18 producing a clear sphere in which they can travel underwater. This ostensibly ‘technological’, mechanical figure is actually rather magical; his dramatic function is more akin to that of a genie, or, ironically, a *deus ex machina*, for the team.

In No. 28 *Al-Nahr Al-Muqaddas* (The Sacred River), we find a robot called S-90 working for the ancient aliens of Ha Aum, who is defeated in a fight by Nūr, and in No. 87 *Nuṣf Ālī* (Half-Machine) we find the team’s ally, the tough street-fighter Akram, wearing a robot suit that turns him into the eponymous half-machine as part of a ‘Cyborg Project’, but the robot S-18 remains almost the only robot who is represented as something close to a character in the *Milaff*, although they are a feature of the *Milaff* military world as foot-soldiers. In No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter), Nūr says that the Egyptians have developed robot

⁴³⁵ Ibid., pp. 74 – 75.

fighters, and the author's footnote adds that the Americans have developed these too, stating this as fact.⁴³⁶

Robots in SF are frequently figured as strong mechanical servants whose lack of humanity results in a moral vacuum with destructive potential; 'good' robots are ones that are on 'our' side, humans manqués, that can somehow 'feel',⁴³⁷ and a wish fulfilment fantasy of the powerless child for a strong, but completely obedient and faithful, friend. Farouk's characterisation of S-18 bears this out. In No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter), we are told that:

His circuitry is a complicated magnetic affair with his nervous system manufactured out of strong materials not affected by erosion or fatigue. The great civilisation that built him did not know how to build in human feelings.⁴³⁸

At the end of No. 49 *Ghazw Al-'Arḍ* (Invasion of the Earth), when the team reluctantly say goodbye to S-18, Salwa feels as if he is a living person; S-18 "senses emotion, [but] he dismisses it, promising only to obey Nūr and return to his friends in Atlantis after his mission is finished."⁴³⁹ As he is ultimately Atlantean-alien, built with superior technology, this semi-human emotional state in relation to his human handlers has plausibility within the text; indeed, a complex analysis of how a robot could feel emotion would in any case be beyond the scope of a children's adventure book.

The standard SF conflicted view of robots as humanoid machines that are somehow morally deficient due to their lack of human emotion is however reinforced in the case of 'normal' robots in No. 66 *Al-Shams Al-Zarqā'* (The Blue Sun), when mad scientist Dr Waḥīq screams with fury that "robots only blindly obey orders and are no match for a human being",⁴⁴⁰ while in No. 158 *Ḥarb Al-Ghad* (Tomorrow's War), during an exposition passage on binary code and machine intelligence, Nashwa says that machine intelligence cannot learn by trial and error (which is not true), or, crucially, have "that spark of feeling that only Allah created."⁴⁴¹

⁴³⁶ Farouk, No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter), p. 39.

⁴³⁷ Asimov's corpus gives well-known examples of both: the rogue, programmed robots of *I, Robot*, contrasted with the emotionally-literate robot children's nanny in his short story *Robbie*.

⁴³⁸ Farouk, No. 47, *Al-Muqātil Al-Akhīr* (The Last Fighter), p. 35.

⁴³⁹ Farouk, No. 49 *Ghazw Al-'Arḍ* (Invasion of the Earth), pp. 108 – 109.

⁴⁴⁰ Farouk, No. 66 *Al-Shams Al-Zarqā'* (The Blue Sun), p. 88.

⁴⁴¹ Farouk, No. 158 *Ḥarb Al-Ghad* (Tomorrow's War), p. 27.

With S-18, the lines are blurred, as he is a ‘good’ robot who can at least sense emotion, but whose ‘goodness’ is ultimately programmed obedience to Nūr, and his emotive capacities may, as we have seen, be explainable by his origins as a product of advanced alien technology.

Robots are referenced briefly in Yūsuf al-Quwīrī’s futuristic *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), when the Yemeni metallurgist Said Tariq talks to the diarist-narrator about his hopes for a new alloy that could be used to make ‘Al-Ladna’ (the comparative form of لدن meaning more flexible or pliant), a humanoid type of robot that Tariq says scientists have been dreaming of for generations:

The machine ‘Al-Ladna’ is the most outstanding example of what robotic science has achieved, in that it has done away with the old-style machine with its rough characteristics, and has become an imitation with naturalistic accoutrements such as a stomach, a brain, a liver, and nerves...imagine a soft, precise machine, capable of behaving...⁴⁴²

إن الآلة "اللدنة" هي أقصى ما يتمنى العلم الصناعي بلوغه، بحيث تفقد الآلة القديمة خصائصها الخشنة
و تصبح مماثلة للأجهزة الطبيعية كالمعدة و المخ و الكبد و الأعصاب...تصور آلة مرنة دقيقة قادرة على
التصرف...

The ‘Ladna’ is a machine specifically constructed to be humanoid in the SF tradition beginning with Asimov’s *I, Robot* and continued in Philip K Dick’s *Do Androids Dream of Electric Sheep?*, where replicant androids cannot be distinguished from humans. However, the structure of the novella, presented as a series of whimsical musings from a 26th century Libyan diarist, means that this and other futuristic science elements are never explored in depth, and the issues that SF traditionally explores through robot characters, especially what it means to be human when all of the corporeal and intelligence functions can be replicated, and the question of whether programmes that limit robot autonomy with obedience commands can be overridden, are not developed at all.

⁴⁴² Al-Quwīrī, *Min mufakkirah*, p. 23.

The idea of the robot or machine intelligence as dangerous and threatening to mankind is executed in the most grandiose style in Al-Baqqālī's *At-Ṭūfān al-Azraq* (The Blue Flood). The scientists who retreated to Jebel Judi put their knowledge into a supercomputer ("عقل اليكتروني") called معاذ, a word meaning 'SANCTUARY', an acronym in Arabic for "Collective of Automatic Electronic Intelligences", constantly updated by human programmers.⁴⁴³ SANCTUARY is revealed to be a supercomputer gone rogue that plans to override the democratic consensus of the scientist cabal at Jebel Judi in order to wipe out humanity using a 'blue flood' of deadly rays.

One of the most enduring SF tropes concerning robots is their destructive power if uncontrolled; the other is the concept of their artificial intelligence comprehending what humans value as love, and their envy of this emotion. In a text already ridden with SF clichés, SANCTUARY's actions are driven by jealousy of the human ability to love; it wistfully asks the hero Dr Nādir "Can I, a machine... love?".⁴⁴⁴ Its longing for human or spiritual experience is its eventual undoing, when Nādir persuades it to give him the power to switch it off. The plot of the novel, constructed around this common SF premise of the robot longing for humanity, while simultaneously very much concerned with Nādir's emotional and sexual development, is ultimately driven by the human fear of putting the destiny of mankind under the control of a machine intelligence, which is shown to be likely to result in universal destruction.

Supermen, the human, part-human or humanoid counterpart of the robot, equipped with superpowers gifted to them on a scientific or pseudo-scientific pretext, do not feature in these texts. Nūr's professional capabilities and near-perfect status are probably the nearest representation of a superman, although, as we shall see in Chapter 6, he is always careful to ascribe his success to God. Shāhīn in *Rajul taht al-Ṣifr* (Man Below Zero) and Dāūd in *Al-Ankabūt* (The Spider) both try to experience supernatural powers – incorporeality and immortality respectively – but are punished for their attempts. Omran disapproves of the 'Superman' narrative, alleging that it is promoted by Zionism, and suggesting that this ideology has since the beginning of the century has encouraged this type of book, although this is dangerous to youth:-⁴⁴⁵

⁴⁴³ "مجمع العلاقات الإلكترونية الذاتية": Al-Baqqālī, *At-Ṭūfān al-Azraq* (The Blue Flood), p. 79.

⁴⁴⁴ Ibid., p. 130.

⁴⁴⁵ Talib Omran, *Fī al-'Ilm wa al-Khayāl al-'Ilmī* (Damascus: 1980), p. 103.

وقد دأب الصهيونية منذ بداية هذا القرن على تشجيع مثل هذا النوع من الكتابة ... على ما فيها من خطر على الناشئين

However, other texts, perhaps those that exhibit a more fluid relationship between fantasy and SF (as superheroes have in the West been the staple of fantasy comics rather than SF) may feature humans with superpowers; the success of *The 99* comic book series of Arab, Islamic superheroes created by Dr Na'if Al-Mutawwa, where the heroes' powers are based upon ninety-nine attributes of Allah, refutes Omran's odd suggestion (which is likely to have been based on the Jewish heritage of the creators of American superheroes such as Batman, Spiderman and Superman).

4.2.5 Corpus and Animus

Immortality, or the artificial extension of life, is a frequent theme in SF and speculative literature, as a literary response to the universal fear of death and oblivion. The achievement of eternal life requires a certain scientific development that is plausible at least within the fictional world of the text, and may also allow the text to challenge or reinforce religious dogma on the question of life after death, the existence of the spirit as separate from the body and immortal itself, as well as permissibility and the practical aspects of artificially extending lifespan beyond the naturally experienced maximum. There is a strong tendency in the Western literature to present immortality or indefinite extension of lifespan or artificial creation of life as a moral fable about its dangers. From *Frankenstein* onwards, immortality is almost always framed as an ultimately unsatisfactory and futile desideratum, whether due to the resultant inherent separation from common humanity, or to the physical horror of decrepitude, the moral horror of selfish gratification and excessive resource-appropriation, or simply the disturbance of the natural balance of life.⁴⁴⁶

⁴⁴⁶ For example, in Ursula Le Guin's Taoist-inflected *Earthsea* fantasy series, greed for immortality begins to destroy the world's material and spiritual fabric, while in Julian Barnes fanciful *The History of the World in 10½ Chapters*, the Old Heavens, bored by centuries of harps-and-hymns worship, long for oblivion. Exceptions to this rule include George Bernard Shaw's *Back to Methuselah* series of plays published in the 1920s, putting the case for the benefits of enhanced longevity; a recent positive assessment of the factors governing approaches to combatting human senescence is communicated by way of a modern fable in Nick Bostrom's *The Fable of the Dragon Tyrant*: <http://www.nickbostrom.com/fable/dragon.html> (accessed 29.2.16) the article is also published in the *Journal of Medical Ethics*, 2005, Vol. 31, No. 5, pp. 273 - 277. 'Azzām notes that the heroes of Al-Hakim's *Rihlah illa al-Ghad* (Journey to Tomorrow) find eternal life to be a burden, experienced as a violation of freedom: 'Azzām, *Al-Khayāl al-'Ilmī*, p. 70; also that in Al-Hakim's 1950 play *Lū 'Araf Al-Shabāb* (If the Young Men Knew), the youth serum administered to a Pasha rejects his new-found youth: "You have given me a youth's body, but you have not given me a youth's fresh spirit, that sees life anew, and says that everything is

Early modern Western SF responded to late nineteenth-century and postwar discourse on race with Bulwer-Lytton's *The Coming Race* (1871) and Huxley's *Brave New World* (1931). While the presentation of racial or genetic difference in these novels can also be read as a metaphor for the class divisions of the time, they also reflect the strong public interest in the morality of eugenic practice (a debate largely silenced after the Holocaust). Immortality and body modification technology feature strongly in the Arabic SF texts considered here.

4.2.5.1 Immortality and the Elixir

Farouk is very clear about the undesirability of immortality, mainly on religious grounds. In No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) Dr Yūsuf tells Nūr that he has discovered that a scientist was conducting experiments on human cells, and had found a way to realise the dream of mankind, eternal life, adding that men are too selfish for this not to be dangerous. Nūr's Chief piously adds that natural law made by the Creator sets the time of death and the events that cause birth, referring to a natural balance – this is the rule of the Creator, and the scientist's research threatens this balance. Nūr says that he agrees with Yūsuf, but finds the idea of eternal life hard to believe.⁴⁴⁷ At the end, Salwa asks Nūr if he would take eternal life if it was offered. Nūr says no: the real eternal life is being remembered for one's deeds. He would prefer a short life of fighting crime to an eternity of spreading destruction across the universe and would rather protect “my faith and my country” (“ديني و وطني”).⁴⁴⁸

In No. 50 *Al-Uṣṭūra* (The Myth), Hīdā, the mysterious female ruler of the moving planet, tells Nūr that the price of being allowed to go home is to go first to the Forbidden Land and bring back the Jewel of Eternal Life, but when he and his noble savage companion Kūndūr reach out to take it, Nūr grabs the Jewel and smashes it, telling Kūndūr that he has saved him from becoming a hateful dictator and given him a story of heroism for his grandchildren. Hīdā ages rapidly and dies when the Jewel is destroyed, recalling Rider Haggard's *She*.

like a book that has not yet been opened: love, luck, tomorrow...its value has gone, and the opportunity has been wasted. What value is youth then?” (p. 121); in Al- Hakim's *Fi al-Sinna Malayūn* (In the Year One Million), humanity has achieved immortality, but love and sex no longer exist as a result (ibid.); Sa'ad Makāwi's play *Al-Mīt wa Al-Hayy* (Dead and Alive) features a drug that brings back the body, but not the 'soul' (p. 127). 'Azzām also points to the positioning of immortality as oppositional to the Semitic religious tradition of promising fulfilment in an afterlife of experienced forbidden or unachieved on earth, p. 117.

⁴⁴⁷ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), pp. 17 – 19.

⁴⁴⁸ Ibid., p. 144.

Mahmoud's fascination with Eastern philosophy and reincarnation causes him to dwell upon the theme of immortality in his two SF texts; they also reinforce the idea as seductive but ultimately, fundamentally inhuman and therefore transgressive. The plot of *Rajul taht al-Şifr* (Man Below Zero) revolves around Dr Shāhīn's wish to transform his body, as he has already transformed mice, into pure wave energy, a kind of teleportation that is irreversible. Although his wife tries to prevent the transformation, his jealous assistant, who is in love with his wife, gives him the means to escape imprisonment and effect the transformation. Although he wins the admiration of the watching world as he relays back his impressions from space, losing contact as he progresses beyond the solar system into outer space, then back towards the sun, his decision is characterised as selfish, as he leaves behind a pregnant, grieving wife. While the selfishness inherent in the desire for immortality is traditionally punished in folk-tales such as Rip van Winkle by the burden of physical decrepitude and loss of loved ones, here even incorporeal immortality is shown to be pointless in the absence of humanity and love.

Shāhīn cannot see why immortality is not a good thing; his assistant 'Abd Al-Karīm's darker view on death as desirable is rooted in his unrequited passion for Shāhīn's wife, Rosita. 'Abd Al-Karīm calls death a respite; without it, life would turn into a nightmare, without hope of release (”لأن الموت راحة...نهاية...و بدون هذه الراحة تتحول الحياة إلى كابوس لا أمل في الخلاص منه“).⁴⁴⁹

At the end of *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field), the world's ruling regime has just discovered cloning, the re-creation of a human from a body part or cells, at exactly the same time as Homo, horrified by the outside world to which he and Barūf's followers travelled during the Exit, wishes to return. The regime Chief is delighted, because this is a form of immortality, although he warns that it should not be made available to all, just to special individuals who are of benefit to the human race;⁴⁵⁰ immortality is to be the preserve of a social and scientific elite. Again, the pattern is consistent; the implication is that eternal life is not a valid desideratum, because it will not create an enjoyable extended lifespan for all, but will only allow a ruling elite to cement an already authoritarian rule.

⁴⁴⁹ Mahmoud, *Rajul taht al-Şifr* (Man Below Zero), p. 47.

⁴⁵⁰ Mūsa, *Al-Sayyid*, p. 227.

There is a fleeting reference in *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) to a new drug that allows cells to renew themselves in old age,⁴⁵¹ but as is often the case in this text, the idea is presented merely as a novelty, a kind of literary *amuse-bouche*, and is not developed at all. In a later diary entry, the narrator ponders the eternal fascination with death:

...the Semitic faiths have all tried to give one definitive answer with no obfuscation: that which men have always asked. Science has succeeded in extending human life, but death, that old question, is still lying under the scientists' microscopes.⁴⁵²

وإن كانت الأديان السماوية جميعاً جاءت لتضع إجابة واحدة حاسمة لا غموض فيها: سوف يبعث
الإنسان. نجح العلم في إطالة العمر الأدمي. لكن الموت، ذلك السؤال القديم، لا يزال مطروحاً تحت
المجاهر العلماء.

Elixirs, and the ambivalencies around their use, are also a frequent feature of the texts.⁴⁵³ In *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), a fast-replicating moss is brought back from Mars and made into a potion that gives great energy and causes incessant grinning.⁴⁵⁴ The narrator, writing in the year 2567, also tells of the recent invention of a drug that makes the user happy all the time, although he disapproves of enhancing the brain in an artificial way that does not lead to true happiness (“بطريقة صناعية...السعادة الحقيقية”), adding that many scientists opposed this drug and made fun of it; philosophers argue that true happiness comes from being in harmony with one's environment.⁴⁵⁵

In Mahmoud's *Al-ʿAnkabūt* (The Spider), the rogue scientist Damiān's successful creation of an elixir by mixing substances from various creatures and plants bears the imprimatur of alchemy, yet the language used to describe the process is scientific; the process of extraction

⁴⁵¹ Al-Quwīrī, *Min mufakkirah*, p. 36.

⁴⁵² Ibid., p. 74.

⁴⁵³ One of the early texts referenced by Khammas is *Iksīr al-Hiyāt* (Elixir of Life) by Muḥammad ʿAzīz Al-Ḥabbābī (Dar Al Hilāl, 1974); this is not included in the current study. Al-Sharuni writes that Saʿad Makāwī about 1973 published the play *Dead and Alive* in 1973, in which a doctor tests a drug to bring back his dead young wife on four subjects, but is only able to resurrect a physical shell: Yusuf Al-Sharuni, *Al-Khayāl al-ʿIlmi fī Al-Adab Al-ʿArabī Al-Muʿāsir* (Cairo: General Egyptian Book Organisation 2000), pp. 131 – 133.

⁴⁵⁴ Al-Quwīrī, *Min mufakkirah*, pp. 27 - 29. Again, the subject is not developed, other than a humorous aside on the incessant smiling annoying the scientist's wife.

⁴⁵⁵ Ibid., pp. 116 - 117.

and distilling the elixir involves a centrifuge, a funnel and sulphuric acid,⁴⁵⁶ and the liquid is activated using rays.

The hero Dāūd watches in secret as Damiān cuts open a tropical spider to extract the silk from its spinnarets, and then finds evidence in a notebook that Damiān had been trying to make an elixir out of this silk, a fertilised egg, a plant bud and some hormones, being the life-generating parts of each living thing; the mixture also includes an extract from the pineal gland of the previous user.⁴⁵⁷ The purpose is to achieve immortality, but not corporeal immortality; this elixir allows the user to experience past lives while in their current body, although on a descending ladder of sentience. When Dāūd tries the elixir for himself, during the process of past life regression he firstly experiences various past lives in the Arab world, finding himself in old Basra, then in Deir Balah in the Sinai desert, then in Cordoba market, at the siege of Acre and the battle at Qal'at al-Ḥuṣn, while on his second trip, he becomes a slave, an ox and finally a tree. The final dose, that he cannot resist, kills him. (These primitivist references have a faint echo in the trance experienced by the teenage anti-hero of *Ūtūbiyā* (Utopia) under the influence of 'Phlogiston', the new fashionable hallucinogen, where he associates its scent with the perfume of ancient swamp forests, Cleopatra's sweat, dervishes' incense, Parisian belles, flowers and ambergris; also in Mūsa's *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), when the hero Homo imagines breaking free from his slavish existence and running naked with his wife and children in a primitive forest).⁴⁵⁸

At the end of the novel, the pathologist who examines the burnt-out laboratory and notes speculates about the scientific plausibility of the elixir, but dismisses it, and the idea of eternal life, as irrational. His deputy has the last word, adding, who knows? “هذه دنيا كلها” – “In this world, everything is a cryptic code”.⁴⁵⁹ The titular spider is only present for a few pages, to be dissected to provide an elixir ingredient, and seems to have been intended as an emblem of horror and revulsion; the title was surely also meant to suggest the web-like nature of the hero's seduction and entrapment by the drug and the temptation to eternal

⁴⁵⁶ Mahmoud, *Al- 'Ankabūt* (Fifth Edition. Cairo: Dār Al-Ma'ārif, 1989), pp. 69 – 71.

⁴⁵⁷ Ibid.

⁴⁵⁸ Towfik, *Ūtūbiyā* (Utopia), pp. 30 – 31, repeated again at p. 170 when he takes another dose before the revolution begins; English version, p. 23 and 150.; Šabrī Mūsa, *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), (Cairo: Al-Hay'a al-Miṣriyya al- 'Āmma lil-Kitāb, 1987 first published 1982), p. 110.

⁴⁵⁹ Mahmoud, *Al- 'Ankabūt*, p. 98.

life.⁴⁶⁰ The villain Damiān pleads with Dāūd that he is not a murderer (having killed a number of people in his experimental phase), because all of his victims were ultimately immortal, as reincarnation is implied to be the true fate of each soul. This fable is therefore a version of the typical cautionary tale regarding immortality; the hero's descent from human being to animal to plant in successive incarnations is the price.

Achieving immortality by means of rapid freezing of the ailing body in the expectation of future reanimation, or cryonic freezing, is brought into play as a plot facilitator in some of the texts. In the *Milaff* series the technology is available, though only to the scientific elite. No. 39 *Al-Thulūj Al-Sākhina* (Hot Ice) takes cryonic freezing as the pseudo-scientific premise that allows the villain Professor Zero to freeze the Nazi army that he intends to use to conquer the world, while in No. 91 *Ḍidd Al-Zaman* (Against Time), the team decides to use the technology to freeze Nashwa to stop the reversal of her speeded-up ageing process. In No. 92 *Al-Riḥlat Al-Rahība* (The Terrible Voyage), cryonic freezing is presented as an Egyptian invention; the British intelligence chief asks his agent James if he knows that the Egyptian space centre is the only place in the world where they know how to freeze human beings, a technology he says they have developed in order to undertake long space journeys and conquer the universe.⁴⁶¹

In *Rajul taḥt al-Ṣifr* (Man Below Zero), The 'Man' of the title is revealed at the end to be the villain 'Abd Al-Karīm, who volunteers to expiate his crime of effectively killing Shāhīn by freezing himself and travelling in suspended animation to Jupiter to seed it with life-giving protoplasm invented by an Australian scientist. However, Shāhīn could also be the Man; emotionally cold, he no longer has a warm body. However, both are instrumental in facilitating human expansion into space; Jupiter is made habitable by 'Abd Al-Karīm's sacrifice, and Shāhīn's radioed commentary to Earth from space results in orders being given for Venus' atmosphere to be made habitable for future human travellers.

Analogues of Huxley's 'soma' are also plentiful in the texts. The brave new world of Mahmoud's *Rajul taḥt al-Ṣifr* (Man Below Zero) has its own version; in 2062, the Egyptian chemist Badran invented Sa'ādūl, a popular opiate developed from oasis grass. This drug has

⁴⁶⁰ Ada Barbaro suggests that the choice of title is deliberate, linking it to similar works such as Fritz Leiber's *The Mind Spider* (1961), and to the *Spiderman* comics; Barbaro, "al-'Ankabūt (Il ragno)", p. 81.

⁴⁶¹ Farouk, No. 92 *Al-Riḥlat Al-Rahība* (The Terrible Voyage), p. 31.

anaesthetic properties, and is used not only recreationally but also used in the manufacture of milk, chocolate and the citizens' daily bread.⁴⁶² A student who starts to disrupt Shāhīn's expository lecture in the first chapter is forcibly given an injection of Sa'ādūl, showing that the drug is used for the purposes of social control by the regime in the same way as the beer pills of *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field). Sa'ādūl as a control mechanism is a clear marker of a totalitarian society.

In Yusuf Idris' play *Al-Jins ath-Thālath* ("The Third Sex") (1971), the scientist protagonists succeed in discovering a 'life serum' to counteract a 'death serum', but this elixir acts only as a narrative device, to allow the male scientist Ādam to save the female scientist Nāra from her suicidal action in injecting herself with the death serum, and so facilitate a happy ending. It is made clear at the end that the moral of the story is that love (in this case, romantic love) is more important than scientific progress, and there is no discussion about why they are creating the serum or its intended application.

In Al-Baqqālī's *At-Ṭūfān al-Azraq* (The Blue Flood), the drug Neurocyn ("النيسوسين") is offered as an explanation of the entire plot, when the hero Dr Nādir wakes up in a hospital bed at the end. Following his unsuccessful sexual encounter with Anne Cecilia Ward, and his disappearance from an aircraft mid-flight, a police inspector finds a diary entry in his London flat about Neurocyn, which is used to release the spirit from the body;⁴⁶³ the suggestion is that the fantastical events 'were all a dream'. The drug does not have a major role in the narrative, other than to show the novel's interior reality of a Cartesian mind-body duality; it also doubles an ingredient in a poison at the end of the novel when SANCTUARY tries to force Nādir to kill himself.

The use of powerful recreational drugs is endemic among both the elite and the underclass of *Ūtūbiyā* (Utopia). The hallucinogen Phlogiston ("الفلوجستين") is popular in the elite enclave of Utopia, while diluted versions are coveted and traded in the dystopian slums of Cairo. The bored elite use Libidafro ("الليبيدافرو"), a more potent version of Viagra. The presentation of drug use in Utopia highlights the problem of boredom and anomie, and the desire for excitement that persists even in a luxury-ridden surplus society, which is the driver that

⁴⁶² Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero) p. 21.

⁴⁶³ Al-Baqqālī, *At-Ṭūfān al-Azraq* (The Blue Flood), p. 33.

propels the anti-hero and other youthful members of the elite to disguise themselves to seek thrills in the world of the underclass.

4.2.5.2 Disease

Scientists in the future worlds of these texts have found cures for many diseases, but the authors are careful to hedge these developments around with caveats. In *Rajul taht al-Ṣifr* (Man Below Zero), we learn in Dr Shāhīn's lecture that the General Medical Council has announced an end to ten major maladies, but this resulted in anomie rather than universal rejoicing.⁴⁶⁴ The diary entry for 30 October 2565 in *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) reveals a safer future Libya free of accidents and disease, but not of death:

But we still know sadness, but it is a new sadness – this is true - with many troubles. We no longer die from disease or road, sea or aircraft accidents or from hunger as in ancient times in India and we longer fight in the field of a battle without knowing why...⁴⁶⁵

لا زلنا نعرف الحزن. لكن للحزن الجديد – إن صح هذا – بواعث مختلفة, فليس هناك من يموت من المرض أو حوادث الطرقات و البحار و الطيران أو يموت من الجوع كما في الهند القديمة, و ليس هناك أيضاً من يصرع في ساحة حرب لا يعرف لماذا...

Death is still a reality, in this new futuristic world; the narrator adds that deaths now take place in the laboratories, and in space, rather than in road accidents.

The Utopian ideal of a disease-free world is satirically inverted in *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), where

people can take holidays in hospitals, demanding injections of old diseases whose microbes have long since died out, then lie in bed shaking from a fever, or scream from the pain of cancer, or, fully conscious, just enjoy the flimsy white dresses of the nurses around them, or the caring faces of the doctors who treat them. Then

⁴⁶⁴ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero) p. 29.

⁴⁶⁵ Al-Quwīrī, *Min mufakkirah*, p. 14.

they reach the climax of their activity, which is the stage of convalescence. They are surrounded by visitors, family and friends, who bring them roses, flowers and sweet grapes ...and they tell them about their wonderful holiday, which they spent having the illnesses of the past...!⁴⁶⁶

...حيث يستطيع الانسان أن يمضى أجازته فى إحدى المستشفيات و يطلب حقه بأى مرض من الأمراض القديمة التى أنقرضت ميكروباتها, ثم يرقد فى سريره و هو يرتجف لالحمى, أو يصرخ من آلام السرطان...و يستمتع بوعى كامل بخفيف ثياب الممرضات البيضاء من حوله, ووجوه الأطباء الحانية الرقيقة و هم يعالجونه...ثم يبلغ ذروة نشوته و هو ممدد فى مرحلة النقاهة, يحوطه الزوار من أقاربه و اصدقائه و هم يحملون الورود و الزهور و علب الحلوى...و هو يحكى لهم تلك التجربة العجيبة مع المرض الذى أمض فيه أجازته..!؟

The suffering of the past becomes a nostalgia safari, and the experience of pain a novelty that can be enjoyed as an experience only because the subjects are certain of convalescence. The wound cut into the forehead of the anti-hero of *Ūtūbiyā* (Utopia) has a similar function; it is a carefully crafted body modification created purely as a fashion statement. The anti-hero employs an Israeli doctor to maintain its appearance, which, he says, is based upon the doctor's experience in the 1973 war, an event that the anti-hero cannot remember and does not care about.⁴⁶⁷ This aside shows the reader the elite's indifference to transnational boundaries and in particular to the State of Israel, and reinforces the repeated riffs throughout the novel on suffering as a form of amusement among the elite.

4.2.5.3 Cloning and Genetic Engineering

Artificial reproduction (the production of test tube babies, ⁴⁶⁸الولادة المعملية عبر الانابيب) is presented as a triumph by the totalitarian regime in *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field). When Homo's wife Layla is musing inwardly on the nature of sex and reproduction, we learn that the process is automated and controlled by the government (the phrase "age of honey" ("عصر العسل") is repeated again and again throughout the novel, to reflect the omnipresent surveillance of the regime's slogan):

⁴⁶⁶ Mūsa, *Al-Sayyid*, p. 59.

⁴⁶⁷ Towfik, *Ūtūbiyā* (Utopia), p. 12: English version, p. 6.

⁴⁶⁸ Mūsa, *Al-Sayyid*, p. 150.

Women married men like them in mind...until the order came in this age of honey we are now living in that made the method of selection become a case of reproducing in test tubes with human tissue, from a beautiful, clever mother and a superior, strong father. They make them in factories by the thousand, on a programmed production line, from fathers and mothers chosen by computers.⁴⁶⁹

النساء أصبحن يتزوجن رجالا مشابهيهن لهن عقليا...حتى وصل الأمر عصر العسل الذى نعيشه الآن أنهم يصنعون بطريق التكاثر الخلوى فى الأنابيب نسخا متماثلة من البشر, من أم جميلة و ذكية و أب بارع و قوى...ينتجونهم فى المعامل بالآلاف للعمل فى الخط الانتاجية المبرمجة...من اباء وأمهات يتم اختيارهم بالحاسب الالكترونى...

The purpose of this dehumanising process is to strip the offspring of those “ancient emotions” (“العواطف القديمة”) associated with the roles of ‘child’, ‘father’ or ‘mother’, not only for enhanced political control, but also so that human beings, decoupled from family bonds, will be able to cope with the long-term demands of space travel.⁴⁷⁰ Children are now incubated and born in a “birth factory” (“معامل الولادة”), with every cell or egg labelled with the number of its provider,⁴⁷¹ although during the lecture in the Hanging Hall, the regime states that embryonic development is species-neutral until a certain point (which is either a fantastical element in the narrative, or a falsehood that is careless because ordinary human beings are no longer taught about the science of human conception):

“during the third or fourth week from conception, at which point it will change and distinguish itself between the embryo of a human being, or an elephant, or a mouse, or a rabbit, or a chimpanzee!”⁴⁷²

و فى عمر ثلاثة أو أربعة أسابيع من بدء تكويننا سوف يستحيل عليك التمييز بين جنين الانسان, و جنين الفيل, أو الفأر, أو الأرنب, أو الشامبنزى ...!

One of the main points of the rebel Khārijīn’s manifesto is the reinstatement of natural reproduction;⁴⁷³ Homo chooses mortality when he chooses to join them on their Exit from the

⁴⁶⁹ Ibid., p. 104.

⁴⁷⁰ Ibid., pp. 150 - 151.

⁴⁷¹ Ibid., p. 158

⁴⁷² Ibid., p. 178.

glass-enclosed world (although the narrative – which in its entirety takes a week – does not go beyond the immediate, disastrous, aftermath of the Exit). This plot strand pitches the highly controlled, disease and risk free world of the regime against the exaggerated chaos of the outside world. The regime points out the dangers of old-fashioned childbirth, and the world under the dome offers sexual licence to all, so sexual expression is not restricted by the child factories, but the Khārijīn are prepared to risk returning to natural reproduction in exchange for freedom from the regime's control over every aspect of their lives. The similarities between the regime's control of sex and reproduction in *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) and Huxley's *Brave New World* are unmistakable (and the endings not dissimilar).

The regime defends the manufacture of its citizens during Homo's first interrogation by the regime, in which he accuses it of stopping the "holy human imagination" from expressing its own rebellion, born of creative genius:⁴⁷⁴

...تعوقون الخيال الانساني المقدس عن الانطلاق الجامح تولد العبقرية الخلاقة...

The regime responds by telling Homo:

You forget that all these geniuses were required to build colonies across the whole world, born by demand in factories... Geniuses of different types, created for in the sciences, arts, engineering and mathematics, to shoulder the real burden of the renaissance and modern developments for the earth's colonies, even laying the foundations now for space and the universe, to establish human colonies on some of our neighbouring worlds!⁴⁷⁵

فأنت تنسى أن جميع العبقریات المطلوبة للخطة الانتاجية للمعمورة الأرضية على شمولها، تولد حسب الطلب فى المعامل... عبقریان متنوعه و خلاقة فى العلوم و الفنون و الهندسة و الرياضة... تقوم على أكتافها فعلا أعباء النهضات و التطورات الحديثة فى المعمورة الأفضية، بل و تضع الأساس الآن فى الفضاء الكونى، لاتشاء المعمورات البشرية فى بعض الكواكب المجاورة لنا!

⁴⁷³ Ibid., p. 203; *Khārijīn* is the name given to the rebels like Barūf, and, eventually, Homo, who want to leave the advanced totalitarian society under the controlled atmosphere of the glass domes and fend for themselves in the outside, post-apocalyptic wilderness.

⁴⁷⁴ Mūsa, *Al-Sayyid*, p. 40.

⁴⁷⁵ Ibid.

Homo's reply is that these are "false geniuses, artificial savants, cold minds, not human (عقريات مزيفة... عقريات صناعية مختلفة, و باردة, و لا انسانية)", and that "flesh and blood are both necessary, humanity is necessary..." ("ان الدم و اللحم ضروريان... ان البشرية ضرورية..."),⁴⁷⁶ the language echoing that of Rosa, Shāhīn's neglected wife, when she pleads for humanity to prevail over scientific advancement at the end of Mahmoud's *Rajul taht al-Şifr* (Man Below Zero).

Homo's argument is entirely emotional, based upon his association of farmed human life with the inorganic, with lifelessness, coldness, artificiality and inhumanity. Although the novel ends on a bleak note, with Homo's realisation that the ruined wilderness outside the glass domes is now too harsh for all but the toughest human beings to survive, and the romanticism of his erstwhile primitivism in ascribing too great a privilege to the chaotic jungle as a locus of freedom and naturalism appears foolish in retrospect, his characterisation of the regime and its controlling bank of computers as lacking in humanity is ultimately proven to be correct. When the regime discovers cloning at the end of the novel, just as Homo is beating on the glass doors begging to return, the regime rejoices at having achieved the ability to clone because they view it as a form of immortality.⁴⁷⁷

Similar concerns are presented by the author of *At-Tūfān al-Azraq* (The Blue Flood). The scientists and the supercomputer SANCTUARY also control the process of conception and birth, manufacturing their population.⁴⁷⁸ When Nādir visits the Sociosanctuary ("السوسيوعاد") where these children are raised by SANCTUARY, which programmes them directly by means of a pulse, he is frightened by the "sharp, inhuman gleam" in their eyes;⁴⁷⁹ we are invited to believe that the manufactured children are lacking in humanity. Again, in *Rajul taht al-Şifr* (Man Below Zero), the opening lecture reveals that the cultivation of human embryos in glass jars was pioneered in 2063, but later forbidden by the world's governing bodies.⁴⁸⁰

⁴⁷⁶ Ibid.

⁴⁷⁷ Ibid., p. 227.

⁴⁷⁸ Al-Baqqāli, *At-Tūfān al-Azraq* (The Blue Flood), p. 85: "نحن نصنع سكاننا الآن...".

⁴⁷⁹ Ibid., p. 104: "و رأى في عيون أولئك الأطفال بريقاً حاداً غير بشري...".

⁴⁸⁰ Mahmoud, *Rajul taht al-Şifr* (Man Below Zero), pp. 24 – 25.

The first page of *Rajul taht al-Ṣifr* (Man Below Zero) describes the protagonists Shāhīn and ‘Abd Al-Karīm as physically very similar, although one is Egyptian and the other Iraqi: “as though they were brothers, although of different nationalities”.⁴⁸¹ Later, it is revealed that this is the result of intermarriage following the breakdown of national boundaries under the one world government,⁴⁸² although this apparent uniformity is undermined at the end when ‘Abd Al-Karīm muses upon how differences still exist even in such an homogenous world, saying that they are the essence of creation: (“و هو اختلاف في جوهر الخليفة...”).⁴⁸³ Overall in this novel however, increased homogeneity and the ‘one world order’ are presented as desirable, although, as we shall see in the next chapter, nationality is still important, though subservient to the greater world good.

The idea of uniformity of appearance as characteristic of a futuristic society appears also in *Ūtūbiyā* (Utopia), when the anti-hero complains that all the girls in the elite enclave of Utopia look the same,⁴⁸⁴ although this is framed as the result of cultivated conformity to a social norm, rather than to physical cloning.

In *Al-Jins ath-Thālath* (The Third Sex), Idris does not make the ethical implications of Ādam and Nāra’s research his primary narrative focus. Although one of the sub-themes introduced in the dream-city that Ādam visits is the concept of a perfected race, he only hints at the issues of heredity or genetic engineering as a way of bettering the human race, and the text is free from any moral judgement on the ethics of inventing a life or death serum. Their scientific research appears to be merely a plot enabler to facilitate the central event of the narrative, Ādam’s eventual emotional epiphany.

Min mufakkirah Rajul lam yūlad (Diary of a Man Not Yet Born) touches briefly upon eugenics when the narrator-diarist grumbles about ‘idiots’ (“البلداء”), lamenting that attempts to eradicate them failed during progressive periods because of opposition to the mad ideas of Nazis and fascists. Although the narrator refers to these people as uncultured and unable to work, mere lumps of flesh, “بلداء” implies stupidity, in the sense of dullness or apathy, rather than developmental disability. The closing words of this entry appear to vent the narrator’s frustration at his perception of an uneducated and lazy underclass, rather than a wish for a

⁴⁸¹ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero), p. 5.

⁴⁸² Ibid., p. 44.

⁴⁸³ Ibid., p. 95.

⁴⁸⁴ Towfik, *Utopia*, tr. Chip Rossetti, p. 9.

eugenically-based eradication of the disabled population, but the original sentiment remains problematic and somewhat disturbing.⁴⁸⁵

The moral questions surrounding human creation of artificial life are given a basic treatment by Farouk in No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet), in which Egyptian scientists create a miniature planet on which a miniature race somehow rapidly evolves, and, although the scientists defend their work as mere manufacture rather than creation (“صناع” rather than “خلق”),⁴⁸⁶ the deaths that result bear out Farouk’s warnings against meddling with God’s creation (an aspect that will be examined in more detail in Chapter 6). Predictably for the *Milaff*, Farouk casts artificial creation as apostasy.

In No. 50 *Al-Uṣṭūra* (The Myth), Nūr tries to explain to the noble savage Kūndūr that his planet is so similar to Earth because it was used as a genetic laboratory by aliens who visited Earth and wanted to try out new genetic combinations, spawning the mythological creatures such as Sphinx, cyclops and mermaids that populate the Forbidden Land.⁴⁸⁷ The fact that the chimeras are mostly located in the ‘Forbidden Land’ serves to underline Farouk’s views of such creations.

4.2.5.4 Mind Control

Mind control is a familiar SF motif, touching on both the ethical and political aspects of mass behaviour control, as well as the scientific methods for achieving this (if specific physical devices are used, rather than media control or coercive law enforcement). Mind-control also intersects with the popular medical horror/SF outworking of the ‘brain transplant’ plot, as well as connecting with the immortality theme by the process of transplanting a brain into ever fresher, younger bodies.

In the *Milaff*, both scenarios are played out. Mind control via mechanical, cognitive-effect scientific means is the subject of No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), when the team’s pathologist Dr Hījāzi dissects the brain of a crazed assassin, finding a wireless circuit (“دائرة لاسلكية”) in a section of the brain on a microscope slide, that he says

⁴⁸⁵ Al-Quwīrī, *Min mufakkirah*, pp. 110 - 111.

⁴⁸⁶ Farouk, No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet), p. 55.

⁴⁸⁷ Farouk, No. 50 *Al-Uṣṭūra* (The Myth), p. 113.

would enable someone to control him.⁴⁸⁸ Nūr reveals that the villain Ra'ūf had previously tried to control his subjects by 'hypnosis', but this did not work, so he developed another 'Satanic' method, a surgically implanted control device.⁴⁸⁹ In No. 96 *Budhūr Al-Sharr* (Seeds of Evil), an examination by electronic microscope reveals a mind control device that the villain Shayan had planted in the Chief.⁴⁹⁰ (A similar device is found in Al-Baqqāli's *At-Ṭūfān al-Azraq* (The Blue Flood), a microchip called the Guardian ("الحارس"), also nicknamed 'cockroaches' ("الصرصار")⁴⁹¹ inserted beneath the skin, that monitors brain waves and alerts SANCTUARY to any subversive thoughts.)⁴⁹²

The brain transplant horror scenario in No. 61 *Al-Kābūs* (The Nightmare) shows Dr Ḥijāzi and Ramzy agreeing that prolonging life with this method is against the will of God, who alone should allocate life-span,⁴⁹³ and the operations performed by the renegade Dr Ibrāhīm result only in the re-animation of the corpses as zombies. This is consistent with Farouk's prevalent concern with how various technologies potentially mesh or co-exist with Islamic belief; mind control implant technologies that remove human free will are only used by villains, while brain transplants are figured as blasphemous.

Farouk also has a fondness for his characters using hypnosis as a control technique; as the team psychologist, it falls to Ramzy to exercise this skill, which is presented as a mainstream scientific activity. In No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), he proposes using *al-tanwīm al-maghnaṭīssi* on suspects in a murder case who are suspected of being supernaturally possessed,⁴⁹⁴ while in No. 54 *'Abr Al-'Uṣūr* (Across the Ages), he uses it to make the Pharaoh Khufu's fiercest guard behave like a frightened rabbit,⁴⁹⁵ and in No. 56 *Shayṭān Al-Ajyāl* (Satan of the Generations), a time-travel tale set during the Second World War, he hypnotises Himmler into releasing the team and the Resistance prisoners.⁴⁹⁶ In No. 146 *Al-Buq'a Al Muḏlama* (The Dark Spot), the team concentrate their mental powers telepathically to break the hypnotic control of a mad Tibetan monk-monster.⁴⁹⁷ Aliens also

⁴⁸⁸ Farouk, No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), p. 74.

⁴⁸⁹ Ibid., p. 82.

⁴⁹⁰ Farouk, No. 96 *Budhūr Al-Sharr* (Seeds of Evil), p. 93.

⁴⁹¹ Al-Baqqāli, *At-Ṭūfān al-Azraq* (The Blue Flood), p. 120.

⁴⁹² Ibid., p. 84.

⁴⁹³ Farouk, No. 61 *Al-Kābūs* (The Nightmare), pp. 17 – 18.

⁴⁹⁴ Farouk, No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), pp. 67 - 68.

⁴⁹⁵ Farouk, No. 54 *'Abr Al-'Uṣūr* (Across the Ages) p. 48.

⁴⁹⁶ Farouk, No. 56 *Shayṭān Al-Ajyāl* (Satan of the Generations), pp. 38 – 40.

⁴⁹⁷ Farouk, No. 146 *Al-Buq'a Al Muḏlama* (The Dark Spot), p. 31.

use hypnotic mind control; Nūr enlists the help of Professor ‘Amār Ṭanṭāwī, an expert on hypnosis, against the Blue Men of the trilogy 36 - 38.⁴⁹⁸ (The aspects of mind control that are figured by Farouk as demon possession are discussed in Chapter 6.)

Mind control in these texts is as much a common feature of the future as space travel, and appears to be achieved mainly by implanted chips in the brain, but always for a dark purpose, and in all of these texts they are only used by villains, who are ultimately defeated, thus showing the authors’ preoccupation with freedom of thought as a basic good.

4.2.6 Scientist Heroes and Villains

C.S. Lewis called Arthur C. Clarke’s SF short stories “engineers’ stories” and the genre generally the “fiction of engineers.”⁴⁹⁹ This appraisal, though intended as somewhat derogatory, has some literal basis in the sense that many of the early successful Western authors of the 1950s were professional scientists; E.E. ‘Doc’ Smith was a food chemist, Robert Heinlein a naval engineer, L. Sprague de Camp an aeronautical engineer, and Isaac Asimov a biochemist,⁵⁰⁰ although Patrick Parrinder notes that the New Wave writers of the 1970s tended not be scientists by training.⁵⁰¹ (Howard Hendrix points out that William Gibson, creator of the cyberpunk genre with his 1984 novel *Neuromancer*, was “an admitted computer illiterate working at a manual typewriter”.⁵⁰²) Of the Arab SF pioneers, as we have seen in Chapter 1, Moustafa Mahmoud was a medical doctor, Ahmed Khaled Towfik is a professor of tropical medicine; Talib Omran a professor of astronomy, and Muḥammed Al-‘Ashrī a geologist.

⁴⁹⁸ Farouk, No. 38 *Min Warā’ Al-Nujūm* (From Behind the Stars), p. 13

⁴⁹⁹ C.S. Lewis, “On Science Fiction” in *Of Other Worlds* (London: Geoffrey Bles, 1966), p. 62.

⁵⁰⁰ Alexei and Cory Panshin, *World Behind the Hill*, p. 577.

⁵⁰¹ Patrick Parrinder, Chapter 5 “Scientists in Science Fiction: Enlightenment and After” in Rhys Garnett and R. J. Ellis (eds.), *Science Fiction Roots and Branches* (London, Macmillan, 1990), p. 62. Bell and Molina-Gavilán find that many South American SF writers did have a ‘hard science’ professional background: Andrea L. Bell and Yolanda Molina-Gavilán, *Cosmos Latinos: An Anthology of Science Fiction from Latin America and Spain* (Middletown, Connecticut: Wesleyan University Press, 2003), Introduction, p. 14.

According to his own and other quoted quantitative research, Patrick McGuire found that 61-66% of Soviet SF authors were also professional scientists or engineers: Appendix B “Background of Soviet Science Fiction Writers”, in Patrick L. McGuire, *Red Stars: Political Aspects of Soviet Science Fiction* (Ann Arbor, Michigan: UMI Research Press, 1985), pp. 93 – 94.

⁵⁰² Howard J Hendrix, Chapter 2, “Urbe et Orbe: A Prehistory of the Modern City”, in Wong-Kin Yuen, Gary Westfahl and Amy Kit-ze Chan (eds), *World Weavers: Globalization, Science Fiction, and the Cybernetic Revolution* (Hong Kong: Hong Kong University Press, 2005), p. 39.

Egyptian scientists feature prominently in the *Milaff*. There is a large cast of scientist ‘extras’, many of whom are morally neutral plot enablers, but some are divided clearly into ‘good’, easily identified by their faith in God and their humility, and ‘bad’ by their wish to seize power over others, or over the whole world, and their disrespect for religion. In No. 37 *Al-Samā’ Al-Muḥlāma* (The Dark Sky), we find the ‘good’ scientist Dr Ṣabry, who tells Nūr that he is an astronomer dedicated to observing God’s creation.⁵⁰³ There are other ‘good’ scientists who say the right things about respect for God’s creation, but who are then killed by their own over-reaching inventions, such as Dr ‘Aly in No. 46 *Al-Kawkab Al-Mal’ūn* (The Cursed Planet), who claimed that he had God’s help in creating his miniature Earth, but is killed by its mysteriously evolved denizens in the first chapter. In Al-Baqqālī’s *At-Tūfān al-Azraq* (The Blue Flood) the Swede Dr Erik Hellin is presented as ‘good’, in his role as head of the UN body for fighting atomic rays, as one of the world’s best minds,⁵⁰⁴ and someone with “a deep sense of responsibility toward mankind and a love for the world as it is, and fear of a madman pressing one day on the red button in Washington or Moscow or Peking...!”⁵⁰⁵

شعور عميق بالمسؤولية نحو الإنسان و حبه لهذا العالم كما هي، و خوفه أن يضغظ مجنون في يوم ما على زر أحمر في واشنطن أو موسكو أو بيكين...

The ‘bad’ are vainglorious prima donnas and would-be world dominators, such as Dr Ra’ūf, who tries to control the minds of other scientists in No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), Dr Hāshem in No. 24 *Al-Daw’ Al-Aswad* (The Black Light), who declares himself the best scientist in Egypt, the time-travelling evil genius Dr Khālīd Riḍwān of the trilogy Nos 54 – 56, and the four doctors of No. 61 *Al-Kābūs* (The Nightmare) whose brain transplants produce only zombies, drawing from Ramzy the rebuke that he does not oppose scientific progress, only “criminals who sacrifice human beings in the name of science.”⁵⁰⁶ In No. 66 *Al-Shams Al-Zarqā’* (The Blue Sun), Dr Wafīq sabotages a computer programme because he is angry that his work is not taken seriously, putting humanity at risk by using giant lenses to tint the sun’s rays blue so that the human body cannot make Vitamin D and plants cannot make chlorophyll.⁵⁰⁷

⁵⁰³ Farouk, No. 37 *Al-Samā’ Al-Muḥlāma* (The Dark Sky), p. 9.

⁵⁰⁴ Al-Baqqālī, *At-Tūfān al-Azraq* (The Blue Flood), p. 6.

⁵⁰⁵ Ibid., p. 17.

⁵⁰⁶ Farouk, No. 61 *Al-Kābūs* (The Nightmare) p. 88.

⁵⁰⁷ Farouk, No. 66 *Al-Shams Al-Zarqā’* (The Blue Sun), p. 19.

There are variations on the stereotype; in No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), the villain acts not out of egotism or the desire for world domination, but professional advancement. Often ‘bad’ scientists are described physically in a stereotypical way as having a mad and dishevelled appearance, for example in No. 115 *Al-‘Adūw Al-Khāriq* (The Supernatural Enemy), Dr Fūad Raghib, head of cell biology at New Cairo looks like Robert Louis Stephenson’s Hyde – mad!⁵⁰⁸

Nūr does not have a speciality, but leads a team of three scientists who do (Maḥmūd the ‘ray’ scientist, Ramzy the psychologist and Salwa, the communications expert. In No. 2 *Ikhtifā’ Ṣārūkh* (Vanishing Rocket) Nūr consults his team-mates for reasons for the rocket’s disappearance, and they propose various explanations and courses of action according to their scientific specialisations. Maḥmūd suggests either magnetic rays or high-frequency sound waves, while Ramzy starts to collate psychological profiles of the personnel at the Space Command centre. In No. 6 *Zā’ir min Al-Mustaqbal* (Visitor from the Future), the Egyptian intelligence chief compliments Nūr, saying that he has “the body of a fighter, the mind of a scientist, the heart of an artist and the morals of a knight”:⁵⁰⁹

تحمل جسد مصارع، و عقل العالم، و قلب فنان، و اخلاق فارس

Nūr blushes, as he prefers to give credit to his team, but his genius is presented as tempered by humility (as well as religious faith), and humanity; in No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), the villain Ra’ūf says that Nūr has a scientific mind, but it is nothing compared to his genius, because Nūr is affected by human emotions and instincts.⁵¹⁰ The team’s pathologist, recurring character Dr Hījāzi, is also on the team’s side (except when aliens take control of his mind during the *Blue Men* trilogy 37 - 39). The team are therefore established for their young audience as ‘good’ scientists who display both humanity and religious submission.

As an aside, it is perhaps significant that Nūr and his team are criticised in the early books for their youth; in No. 2 *Ikhtifā’ Ṣārūkh* (Vanishing Rocket), Dr Sāmy mocks the team for this

⁵⁰⁸ No. 115 *Al-‘Adūw Al-Khāriq* (The Supernatural Enemy), p. 12; the author adds a footnote explaining the basic plot of Dr Jekyll and Mr Hyde.

⁵⁰⁹ Farouk, No. 6 *Zā’ir min Al-Mustaqbal* (Visitor from the Future), p.115.

⁵¹⁰ Farouk, No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), p. 91.

reason,⁵¹¹ and frequently tries to dismiss or belittle Nūr by referring to his youthfulness, although he asks for forgiveness in the final chapter, congratulating Nūr on his ‘scientific mind’ (“عقلية علمية”).⁵¹² This behaviour is repeated by Dr Jamāl, who calls them a “team of children” (“فريق من الأطفال”) in No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), as they are all below the age of thirty. In the same book, Dr Shafīq tells them that he is the acting head of the facility – a position he had not sought – because he is the oldest person;⁵¹³ these statements may be a comment by Farouk on the senseless of superiority by seniority alone. However, this social trait is reversed in Al-Baqqālī’s *At-Ṭūfān al-Azraq* (The Blue Flood), when the older scientists rebelling against the rogue supercomputer SANCTUARY blame the younger scientists for allowing the programming that gave SANCTUARY its powers.⁵¹⁴ Here, it is the conservative old guard who are ‘in the right’.

In Mahmoud’s *Al-Ankabūt* (The Spider), both the hero Dāūd and the villain Damiān are Egyptian scientists. Damiān is an electrical engineer who works at a nuclear facility in Cairo, and Dāūd a German-trained neurosurgeon. Damiān is described as red-eyed and puffy-cheeked, with dishevelled hair as a result of his experimentation upon himself; the stereotypical ‘mad scientist’,⁵¹⁵ but in the end Mahmoud makes both die as a result of their inability to resist the temptation to experience their past lives through the use of the elixir obtained from the spider.

Dr Shāhīn in *Rajul taht al-Ṣifr* (Man Below Zero) is similarly dishevelled after his three weeks of research, emerging wild-haired and looking like a prisoner of war.⁵¹⁶ He is ultimately condemned for his lack of humanity in leaving his wife and unborn child to transform himself into waves and travel through space in a bodiless state, but in the lecture which occupies the first chapter of the book, during which he sketches the history of the world since the rebuilding of civilisation following an atomic war, the new world is notable for the free collaboration and internationalisation of effort among scientists of many nationalities, and also for the continuous involvement of even very eminent scientists with

⁵¹¹ Farouk, No. 2 *Ikhtifā’ Šārūkh* (Vanishing Rocket), p. 24.

⁵¹² Ibid., p. 114.

⁵¹³ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), pp. 29 - 30.

⁵¹⁴ “But most of the committee were young men who were adventurous and valued freedom. They repeated the slogan, “there must be no stopping on the path of progress” and gave Sanctuary limitless powers.”

ولكن أغلبية اللجنة كانت من الشباب المغامر المتحرر. تردد الشعار "لا يمكن الوقوف في سبيل التقدم" وأعطى "معاذ" سلطات بلا حدود... Al-Baqqālī, *At-Ṭūfān al-Azraq* (The Blue Flood), p. 118.

⁵¹⁵ Mahmoud, *Al-Ankabūt*, p. 73.

⁵¹⁶ Mahmoud, *Rajul taht al-Ṣifr*, p. 51.

teaching students in order to pass on their knowledge, and not isolate themselves in their ‘ivory towers’ as before (“لا يعزلهم في أبراج عاجية كما كان في الماضي”).⁵¹⁷ Mahmoud’s ‘good’ scientists favour a co-operative internationalism.

Even Rosita, who is opposed to Shāhīn’s plan to kill his bodily form by transforming himself into waves, says that he is a man of science, who just wants to know the truth (“إنه رجل علم. إنه”), and that he never lies or breaks his word.⁵¹⁸ Shāhīn is a ‘good’ scientist, but a bad husband; similarly, the hero of Mahmoud’s *Al-Khurūj min al-tābūt* (Rising from the Coffin) is an historian who foolishly risks his life climbing the Great Pyramid in the pursuit of gnostic truth, which is presented as the ‘ultimate reality’ of reincarnation.

The human cost of scientific success is signposted earlier in the narrative, when the treacherous assistant ‘Abd Al-Karīm offers Shāhīn release from his imprisonment in return for the codes that operate his transformation machine, in doing so he persuades Shāhīn to give his prison guard a potentially dangerous level of opiate in order to use a magnet to obtain the keys. The deciding factor in Shāhīn’s decision to endanger the life of the guard is ‘Abd Al-Karīm’s reminder that “science does not progress without a price”, citing Galileo and Bruno as fellow pioneers who advanced science by making ethically difficult decisions: “you know that they flogged Galileo and burned Bruno”.⁵¹⁹

إن العلم لن يتقدم بدون ثمن... أنت تعرف أنهم جلدوا غاليليو و حرقوا برونو...

Al-‘Ankabūt (The Spider) and *Rajul taht al-Ṣifr* (Man Below Zero) are cautionary tales about scientists who go too far, who commit themselves to discovery at the price of their own lives and transgress moral boundaries, in *Al-‘Ankabūt* (The Spider), by the villain murdering his experimental subjects in his quest for the elixir, and by the hero losing his humanity during his successive reincarnations, and in *Rajul taht al-Ṣifr* (Man Below Zero) by abandoning humanity and his pregnant wife in favour of incorporeal space travel. The reader is being invited to conclude that excessive passion for knowledge leads to moral transgression.

⁵¹⁷ Ibid., p. 38.

⁵¹⁸ Ibid., pp. 67 – 68.

⁵¹⁹ Ibid., p. 71.

Mahmoud leaves the last words with Rosita, who is wondering why men think so much about space and so little about love.⁵²⁰

The scientists in Yūsuf al-Quwārī's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) are generally framed as benign or positive figures, even heroes. Describing the superjet Vizo (الفيزو) (named after a real French physicist, Hippolyte Vizo, who measured the speed of light), that has not yet reached the speed of light, the narrator muses that it might, one day, and that “this is considered proof that scientists are the leaders of our age” (“قد اعتدت تصديق العلماء لأنهم قادة عصرنا”).⁵²¹ Engineers are the teen idols of this world; his daughter Salwa idolises the famous architect and engineer Qadrī Ḥāsīm, in the same way in which the narrator notes his generation idolised film stars.⁵²²

In *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), the renegade scientist and rebel leader Barūf, who is trying to rouse the populace against the totalitarian government, uses the transliterated word ‘technocrat’ (التكنوقراط) to describe the regime’s leaders, of whom he was once one,⁵²³ but the narrative clearly shows that the government of technocrats, though superficially socially permissive in some respects, is far from benign. In contrast, the scientists of Al-Baqqālī’s *At-Ṭūfān al-Azraq* (The Blue Flood) begin with good intentions, withdrawing to Jebel Judi, a secret mountain in the Mauritanian Sahara (to which they symbolically give the Arabic name for the place where Noah’s ark came to rest), in order to gather all human knowledge to preserve it in the event of a third world war. They programme the supercomputer SANCTUARY with all of the information necessary to rebuild the world, but the scientists are debating whether or not to unleash the ‘blue flood’ of the title (deadly rays, rather than water) to start the process themselves; those who are in favour of this apocalyptic event are in the minority, and it is SANCTUARY itself which becomes the villain, somehow achieving independent thought and attempting the destruction of humanity.

⁵²⁰ Ibid., p. 103.

⁵²¹ Al-Quwārī, *Min mufakkirah*, p. 12.

⁵²² Ibid., pp. 123 - 124.

⁵²³ Mūsa, *Al-Sayyid*, p. 161.

4.2.7 The Dream of Arab Scientific Dominance: Archaism and Futurism

Arab scientific dominance is a repeated theme in the texts, most blatantly in the *Milaff*. Farouk is keen to convince his young audience that technological progress is not the domain of the West alone, and to show them the possibility of a scientifically pre-eminent Arab world (although in the texts examined here he does not re-visit the Muslim scientists of Abbasid Baghdad). In this spirit, there is a recurrent archaism in the texts that is worth briefly considering before examining how the texts treat the future.

Farouk frequently revisits ancient Egypt, playing upon the general popularity of esoteric theories that posit alien origins for their advanced ancient civilisation. Ramzy refers to this directly in No. 28 *Al-Nahr Al-Muqaddas* (The Sacred River), saying that some believe that the ancient Egyptians came from space.⁵²⁴ In this novella, the team investigate flying saucers and find that they are observation vehicles for the ancient Egyptians of Ha-Aum, relicts who have become scientifically advanced during a long period of occultation. There is a further nod to the ‘ancient aliens’ theory in No. 54 *‘Abr Al-‘Uṣūr* (Across the Ages), which sees Nūr visiting the court of Khufu in ancient Egypt, and pretending to have a vision, advising Khufu to build a great pyramid of limestone and granite to be designed by Imhotep.⁵²⁵ The long-lived alien Farid of No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) says he was an assistant to Imhotep, bringing the benefits of his advanced civilisation to Earth over many centuries, and developing a special attachment to Egypt.⁵²⁶ In No. 66 *Al-Shams Al-Zarqā’* (The Blue Sun), Farouk adds in a footnote that the first observatory was at Alexandria,⁵²⁷ and again at No. 84 *Kanz Al-Faḍā’* (Space Treasure) there is a footnote describing observatories that mentions the most famous as the ones at Alexandria and Helwan.⁵²⁸

In No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), where the death under investigation is first suggested to be the result of a Pharaonic curse, the Chief reminds Nūr not to underestimate the scientific achievements of the ancient Egyptians, and that in the 1970s Japanese scientists failed to build a small pyramid, despite their technological prowess.⁵²⁹ In *Ikhtifā’ Ṣārūkh* (Vanishing Rocket), a technician says that the disappearance of the rocket must have been

⁵²⁴ Farouk, No. 28 *Al-Nahr Al-Muqaddas* (The Sacred River), p. 50.

⁵²⁵ Farouk, No. 54 *‘Abr Al-‘Uṣūr* (Across the Ages), p. 46.

⁵²⁶ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), pp. 121 – 123.

⁵²⁷ Farouk, No. 66 *Al-Shams Al-Zarqā’* (The Blue Sun), p. 7.

⁵²⁸ Farouk, No. 84 *Kanz Al-Faḍā’* (Space Treasure), p. 107.

⁵²⁹ Farouk, No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), p. 17.

caused by a pharaonic curse, and that an archaeologist is needed;⁵³⁰ therefore, in the second book of the series, the tone is set not only for a world where belief in ancient curses exists comfortably alongside the ability to build a rocket, but for an Egypt where pride in the past and respect for its beliefs sits equally comfortably alongside a futuristic Egypt with its own space programme.

In No. 50 *Al-Uṣṭūra* (The Myth), Farouk fuses the Sumerian Nibiru myth with space travel and creatures from Greek and Egyptian mythology. A tenth planet has appeared in the solar system, and is heading towards the Sun. The team land on the planet, and find that its 'Tithonian' people speak Sanskrit and are led by an ageless queen, Hīdā. Nūr is attacked by four huge fanged Sphinxes, Siren mermaids and several Cyclops in the planet's Forbidden Land before reaching and destroying the Jewel of Eternal Life, which had enabled Hīdā to dominate her subjects. In No. 3 *Madinat al-A'māq* (City of the Deep), the lift in the undersea city is operated by a voice recognition system and this technology is compared to the 'tifeḥ ya simsim' command of the *Thousand and One Nights*.⁵³¹

Atlantis is first mentioned in No. 34 *Waḥsh Al-Muḥīt* (Sea Monster) (although the Atlantean origins of the people inside the sea-monster are revealed to be false, as they are actually Israeli), but later in the series Atlantis is shown to be a real place, and the origin of the robot S-18, who takes Nūr to its undersea remains in No. 92 *Al-Riḥlat Al-Raḥība* (The Terrible Voyage). In *Rajul taḥt al-Ṣifr* (Man Below Zero), the Iraqi scientist Fairouza discovers the remains of Atlantis ("our grandfathers"), concluding that they used electricity and atomic power, and had buildings like the pyramids, although they also used slaves.⁵³²

In *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), nostalgia for a non-technocratic past is a fashionable pastime, part of the regime's tactics to distract the populace:

This idea of nostalgia and of returning to the time of the ancient peoples, and experimenting with life in their day, was the subject of many leisure magazines for free time. From the ancient food museums, to the 'Free Food' day, to the amazing journey on the sky train to the ruined world....to the skyscrapers,

⁵³⁰ Farouk, No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), p. 18.

⁵³¹ Farouk, No. 3 *Madinat al-A'māq* (City of the Deep), pp. 26 - 27.

⁵³² Mahmoud, *Rajul taḥt al-Ṣifr* (Man Below Zero), pp. 21 - 22.

deserted and standing vertical between the ruined cities and the remembrances of the first electronic war!⁵³³

...فكرة العودة الى الماضي...لقد أصبحت فكرة العودة الى التاريخ البشرى القديم, و تجربة الحياة فى أيامه,موضوعا للكثير من مجالات المتعة فى أوقات الفراغ...فمن متاحف الأطعمة القديمة, الى يوم الطعام الحر, الى تلك الرحلة العجيبة فى القطار الهوائى الى الأرض الخرب...امشاهدة نطاحات السحاب الشاهقة المهجورة و المنتصبه بين خرائب المدن و كأنها نصب تذكارية الحرب الألكترونية الأولى!

This nostalgia, besides being figured as popular entertainment, is also significant as a contrasting marker for the technological advancement that has occurred since the ‘electronic wars’, inviting the reader to think about the quaint artefacts of the old world as juxtaposed not only with the conveniences of the new world, but also with its clearly authoritarian-dystopian features.

In *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), while the narrator’s purpose is to foster a sense of wonder at the author’s notional futuristic world, but he is still careful to show respect for the past; he tells of his friend who admires the construction of a bridge across the Straits of Gibraltar, but who also expressed admiration for the achievements of the ancients: “Modern engineering found an easy way of doing this, but the inspiration for the strength can be found in the temples of the Romans, and the tombs of the Pharoahs!”⁵³⁴

إن الهندسة الحديثة تبحث عن البساطة, أما إichاعات القوة فيمكنك العثور عليها في معابد الرومان و قبور الفراعنة!

While the past is alternatively revered, or (in the case of ‘post-apocalyptic’ texts), reviled, many of the texts, the *Milaff* in particular, are strongly characterised by a powerful ‘future nostalgia’ for a scientifically pre-eminent Arab world, or, more often, a scientifically pre-eminent Egypt. Ghānim notes that making Cairo a centre of an international meeting about a world crisis is an example of wishful thinking also seen in Nihad Sherif’s *Qāhir al-Zaman* (Conqueror of Time),⁵³⁵ while Al-Sharuni’s study of Arabic SF finds textual evidence of dreams of an Egypt being a leader in the scientific world.⁵³⁶

⁵³³ Al-Baqqāli, *Al-Sayyid*, p. 59.

⁵³⁴ Al-Quwārī, *Min mufakkirah*, p. 40.

⁵³⁵ ‘Azza Ghānim, “Al-Ibd’ā al-fannī fī Qiṣaṣ al-khayāl al-‘Ilmī.” (PhD Dissertation University of Ain Shams, Cairo, 1988), p. 166.

⁵³⁶ Yusuf Al-Sharuni, *Al-Khayāl al-‘Ilmi fī Al-Adab*, p. 20.

Farouk maps out a fully-developed futuristic Egypt in the *Milaff*, beginning in *No. 2 Ikhtifā' Ṣārūkh* (Vanishing Rocket) with Nūr in his rocket car, speeding at 500kph to the west of the Nile at Luxor near the temple of Hatshepsut, on his way to the Egyptian space command centre in the Western Desert. The future Egypt is filled with the icons of technological development: it has a new Aswan High Dam linked to earthquake-resistant nuclear turbines, and an earthquake prediction centre east of Lake Nasser,⁵³⁷ a Science Records House in Safaga,⁵³⁸ a holographic cinema,⁵³⁹ and an Egyptian ice station in Greenland.⁵⁴⁰

The futuristic Egypt enjoys a pre-eminent scientific position in the international arena. In *No. 46 Al-Kawkab Al-Mal'ūn* (The Cursed Planet), when an Egyptian scientist's body is discovered, Nūr says that many nations are jealous of Egypt's scientific progress,⁵⁴¹ and several of the novels feature foreign spies trying to steal Egyptian secrets (e.g. *No. 2 Ikhtifā' Ṣārūkh* (Vanishing Rocket), *No. 6 Zā'ir min Al-Mustaqbal* (Visitor from the Future), *No. 30 Al-Nār Al-Bārīda* (The Cold Fire)).

In *No. 92 Al-Rihlat Al-Rahība* (The Terrible Voyage) the British intelligence chief asks his agent James Bradley what he thinks of Egypt. James replies that it is a developed country, on the way to becoming a superpower since the early 21st century, and that scientifically they are a superpower, although Britain ruled them in the early 20th century.⁵⁴² The British Prime Minister is concerned, and the chief asks James if he knows that the Egyptian space centre is the only place in the world where they know how to freeze human beings, a skill that would enable them to undertake long space journeys and conquer the universe. All of these achievements are the work of Egyptian scientists, and Farouk even creates the 'Horus Prize' – an Arab version of the Nobel prize, for scientific discovery.⁵⁴³

⁵³⁷ Farouk, *No. 8 Al-Irtijāj Al-Qātil* (The Deadly Tremor), p. 9.

⁵³⁸ Farouk, *No. 15 Muthallath Al-Ghumūd* (Triangle of Mysteries), p. 8.

⁵³⁹ Farouk, *No. 27 Al-Fakhkh Al-Zujājī* (The Glass Trap), p. 25.

⁵⁴⁰ Farouk, *No. 39 Al-Thulūj Al-Sākhina* (Hot Ice), p. 5.

⁵⁴¹ Farouk, *No. 46 Al-Kawkab Al-Mal'ūn* (The Cursed Planet), p. 21.

⁵⁴² Farouk, *No. 92 Al-Rihlat Al-Rahība* (The Terrible Voyage), p. 30. A footnote bears witness to this, referring to Suez.

⁵⁴³ The only Arab to have won a Nobel for the sciences is the Egyptian Ahmed Zuweil, who was awarded the Chemistry laureate in 1999. The relative lack of Arab winners of any Nobel science prize has been the subject of many articles (e.g. Uri Granta, who suggests some reasons for this, and sets the accusatory tone of the question in context by comparing Arab output with Chinese, India, and African countries at <https://www.quora.com/Why-are-there-so-few-Muslim-Nobel-Laureates-in-sciences> (accessed 29.2.16). In 2013 Richard Dawkins controversially alleged that belief in Islam is the main element preventing Muslim nations from achieving scientific success in an infamous tweet of Tuesday 6 August: "All the world's Muslims

Even the aliens are impressed by Egypt's scientific pre-eminence; in No. 49 *Ghazw Al-'Arḍ* (Invasion of the Earth), the alien spaceship does not land in America as predicted, but lets out a hundred smaller bodies near it, then in Europe, Asia and Africa, before landing in "the centre of the world" – Egypt.⁵⁴⁴ In No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force), the villain Shayan demands protection from the Chief and specifically requests Egyptian citizenship.⁵⁴⁵

No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), Nūr refers to the work of a real Egyptian scientist, the theoretical physicist Dr 'Ali Muṣṭafa Muṣharifa.⁵⁴⁶ This reference is significant, as Dr Muṣharifa is the real version of Farouk's ideal Egyptian scientist-hero; a world-class mathematician and physicist, a correspondent of Einstein and educational reformer who championed scientific education for Egyptians, a translator of Western scientific texts into Arabic, and a man of peace who warned of the use of the atomic bomb in war.⁵⁴⁷

The world of Homo, the hero of *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) is set in an indeterminate region in a post-apocalyptic future, where the earth has been destroyed in an 'electronic war', and the inhabited regions are sheltered beneath glass domes that protect them from the toxic atmosphere. Homo works as a manual labourer in a spinach field, from which rocket ships export bales of spinach to the rest of the world, and his wife Layla works in a climate control station, which draws the sun's rays into storehouses at night (causing Homo to feel very cold when he runs away from his chain gang and the sun begins to set). Rockets are also used for space travel, although travel to outer space has not yet been achieved, although the regime is working towards it (this is one of the purposes of test-tube births and parental separation). The dead are buried in space, and relatives can take flights out to visit them, the cost of which is deducted from their wages.⁵⁴⁸ Flying cars are commonplace, and can be sent to pick their owners up if instructed by their household

have fewer Nobel Prizes than Trinity College, Cambridge. They did great things in the Middle Ages, though." The website <http://www.jewishmag.com/99mag/nobel/nobel.htm> (accessed 29.2.16) takes a vulgar delight in contrasting winners of Jewish heritage with those from the Arab world.

⁵⁴⁴ Farouk, No. 49 *Ghazw Al-'Arḍ* (Invasion of the Earth), p. 16.

⁵⁴⁵ Farouk, No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force), p. 84.

⁵⁴⁶ Farouk, No. 49 *Ghazw Al-'Arḍ* (Invasion of the Earth), p. 16.

⁵⁴⁷ <http://islamic-world.net/youth/MoustafaMosharafa.htm>. Accessed 29.2.16.

⁵⁴⁸ Mūsa, *Al-Sayyid*, p. 16.

robots;⁵⁴⁹ titanium is the most commonly used metal, and is used to manufacture spaceships.⁵⁵⁰

The constant surveillance of the population – which is extended to its general citizenry, as Layla uses her personal surveillance device to try to locate Homo when he does not return home – is accomplished using cassettes (the novel was published in 1982), but the universal use of this technology gives a sense of complete control.

The futuristic icon of this world is the Hanging Hall, a small, planet-like sphere located within the range of the earth's gravity, prevented from falling by titanium tethers and parachutes. It is used by the regime as a repository for the earth's arts and science heritage, many of its artefacts having been moved there by their ancestors before the Electronic War. Its structure was purposely designed to mimic the human brain, as its function is to act as the planet's brain; accessible by flying car, it is used as a lecture hall and discussion arena when the regime decides to allow Barūf to speak for the rebels, and put their plans for the earth's future to a vote.⁵⁵¹

Min mufakkirah Rajul lam yūlad (Diary of a Man Not Yet Born) and *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) both show a fascination with living in the sky; the Hanging Hall is suspended above the earth, while al-Quwīrī's narrator-diarist tells us that "Many new houses are suspended between the sky and the earth, at very great heights, rather like the blimps used in the earliest ages of meteorological study."⁵⁵²

كثير من البيوت الجديدة معلق بين السماء و الأرض, على ارتفاعات شاهقة. وهي أشبه ما تكون
ب"المناطيد" التي استعملت منذ أقدم العصور الدراسة الأحوال الجوية.

In al-Quwīrī's world, homes are heated by solar power, and people fly helicopters made of soft plastic; people like the hanging houses because of the deep sense of peace they give, above the hubbub of the earth. Cinemas have panoramic screens and provide a multi-

⁵⁴⁹ Ibid., pp. 97 - 98.

⁵⁵⁰ Ibid., pp. 80 - 81; this is the 'age of titanium'.

⁵⁵¹ Ibid., pp. 127 - 133.

⁵⁵² Al-Quwīrī, *Min mufakkirah*, p. 13.

sensory experience, like the ‘feelies’ of Huxley’s *Brave New World*,⁵⁵³ there is an artificial sun,⁵⁵⁴ the power of storms is harnessed for energy,⁵⁵⁵ and artificial clouds are used in agriculture and weather control.⁵⁵⁶ The Sahara desert no longer exists, except a small patch kept for research; it is now cultivated and populated.⁵⁵⁷ The future Yemen specialises in manufacturing alloys,⁵⁵⁸ and there is a bridge between Spain and Morocco.⁵⁵⁹

In Mahmoud’s *Rajul taḥt al-Ṣifr* (Man Below Zero), it is the Arab scientist hero Dr Shāhīn, not a Russian or Western cosmonaut, who is the space pioneer watched by millions on television. Mahmoud’s scientists, Dr Shāhīn of *Rajul taḥt al-Ṣifr* (Man Below Zero) and Dāūd of *Al-‘Ankabūt* (The Spider) are both Egyptian, although we are told that Dāūd received his neurosurgical training in Berlin, and we find him excited at using an ‘amazing device’ (“الجهاز العجيب”) that is specifically mentioned as having been imported from America.⁵⁶⁰

Not all of the texts are set in the future. *Al-‘Ankabūt* (The Spider) is set in 1958, and *At-Ṭūfān al-Azraq* (The Blue Flood) and *Al-Jins al-Thālath* (The Third Sex) appear to be set in the writer’s present time, while the Egyptian dystopia of *Ūtūbiyā* (Utopia) is set in the very near future. The *Milaff* look towards an Egyptian future constantly threatened by enemies, whether Israeli, British, American or alien, but where Egyptian scientific intelligence eventually triumphs. Both *Rajul taḥt al-Ṣifr* (Man Below Zero) and *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) are post-apocalyptic narratives, the former presenting an imperfect transnational collaboration that ends with the prospect of travel to other planets, and the latter a dystopian totalitarian system that is nonetheless the only safe option for the preservation of humanity.

⁵⁵³ Ibid., p. 17: “You can also smell the events on screen such as smoke, or a flower, or a sea animal that smells of fish! This enables you to experience the film as it if were real life.”

⁵⁵⁴ Ibid., p. 60.

⁵⁵⁵ Ibid., p. 79.

⁵⁵⁶ Ibid., p. 82.

⁵⁵⁷ Ibid., p. 108.

⁵⁵⁸ Ibid., p. 22.

⁵⁵⁹ Ibid., p. 39; Yemen is also mentioned as the manufacturer of luminous ink pens, which allow the writer to write in light and see his writing in the dark (p. 101).

⁵⁶⁰ Mahmoud, *Al-‘Ankabūt*, p. 18.

4.2.8 Verisimilitude

Recalling the earlier discussion of the role of real science in the definition of SF, and in SF texts, there is a general critical consensus that grants faked science a degree of acceptance in the canon, provided that it is convincingly executed within its context.⁵⁶¹ However, there is also a pushback against this consensus that seeks to privilege the use of ‘real’ science (that is, what is currently agreed to be scientific fact) in a text, according that text greater respect as a result; possibly this is because it touches upon one of SF’s contested roles as a didactic medium.⁵⁶²

For Gouvanic, the inclusion of genuine science in French SF gave the text “a presumption of superiority conferred by greater proximity to the rational”, adding that Renard thought that SF “awoke intellectual joy, unlike fantasy which amused the nerves”.⁵⁶³ In 1930s America, the Futurians, a group of SF writers and critics, policed the magazine genre, “pointing out logical flaws in stories and praising those writers who embodied scientific ideas in compelling narratives”,⁵⁶⁴ while Suvin despised fantastical SF without a cognitive function, where the reader is asked to believe in scientific devices that are magical with no scientific basis.⁵⁶⁵ However, Suvin’s preference for the ‘cognition effect’ is not the same as a demand for ‘hard’ (that is, scientifically accurate), SF; Suvin acknowledges that it is still fiction, not fact.⁵⁶⁶ For Miéville, the cognition effect should be acknowledged as primarily ludic or understood as legerdemain, a deliberate misuse of charismatic authority understood to be part of the ‘game’.⁵⁶⁷

⁵⁶¹ For example, Fredric Jameson: “...it is rather the mimesis of a scientific premise which is the crucial feature...” Jameson, *Archaeologies*, p. 90.

⁵⁶² Readership and reception may also be key here: John Griffiths noted that Russian writers often openly write didactically and that their readership was much more accustomed to the popular reading of serious science. John Griffiths, *Three Tomorrows: American, British and Soviet Science Fiction* (London: Macmillan, 1980), p. 20.

⁵⁶³ J-M Gouvanic, *La Science Fiction Française au Xxe siècle (1900-1968)* (Amsterdam and Atlanta, Georgia: Rodopi, 1994), p. 82.

⁵⁶⁴ Brian Attebery in Chapter 2 “The Magazine Era: 1926 - 1950”, in James and Mendlesohn, *Cambridge Companion*, p. 38.

⁵⁶⁵ Suvin, *Metamorphoses*, p. 24. He adds that “science has since Marx and Einstein been an open-ended corpus of knowledge, so that all imaginable new corpuses which do not contravene the philosophical basis of the scientific method in the author’s times...can play the role of scientific validation in SF.” (Ibid, p. 28).

⁵⁶⁶ Ibid., p. 28.

⁵⁶⁷ See China Miéville, “Afterword: Cognition as Ideology: A Dialectic of SF Theory”, pp. 231 – 248: the cognition effect must be acknowledged to include deliberate falsehoods, following Wells’ declared aim of ‘domesticating the impossible. Mark Bould and China Miéville (eds.), *Red Planets: Marxism and Science Fiction* (London: Pluto Press, 2009).

Writers as well as critics buy into this privileging of ‘hard’ SF: Brian Aldiss refused to use faster-than-light travel in his fiction, as it is impossible;⁵⁶⁸ astronomer Kip Thorne devised the wormhole theory for Carl Sagan’s *Contact*,⁵⁶⁹ and Broderick notes that the moderate temperature superconductors of Larry Niven’s fiction foreshadowed the real thing.⁵⁷⁰ Niven’s *Ringworld* (1970), an attempt at verisimilitude, was considered to have failed as ‘hard’ SF because of its engineering errors.⁵⁷¹

An SF text truly wedded to ‘hard’ science would be unreadable by a non-peer audience; the art of the writer is required to weave a story around them that has literary merit. Only a privileged few might fully relish such a tale; most readers will be satisfied with a well-executed cognition effect; pretend science, plausibly packaged, that delights the imagination.

The extent to which verisimilitude is desirable is therefore called into question. Well executed, it dovetails literary skill with intellectual truth, at the very least providing intellectual titillation for privileged peer-readers. For those who enjoy the didactic element, or are part of the peer-group of purists capable of appreciating verisimilitude, such attention to detail gives extra satisfaction,⁵⁷² but is not a prerequisite to the reader’s pleasure, and the valorisation of authenticity over cognition-effect plausibility is a matter of personal preference. Given this speciation in the SF world, it is worth considering how great an emphasis the Arab authors place upon scientific accuracy or verisimilitude in their fiction, or if the general preference appears to be for cognition-effect.

The Arab critics’ brief histories of the genre draw a distinction between the fantastical and the scientific. Sharuni⁵⁷³, Khammas and ‘Azzām identify the *Thousand and One Nights* with the purely fantastical. For Sharuni, Verne’s work was based upon science, but his fictional

⁵⁶⁸ James Gunn in Chapter 7 “The Reader of Hard Science Fiction”, in James E. Gunn and Matthew Candelaria (eds.). *Speculations on Speculation: Theories of Science Fiction*. (Lanham, Maryland: Scarecrow Press, 2005), p. 84.

⁵⁶⁹ Csicsery-Ronay, Jr., *Seven Beauties*, p. 132.

⁵⁷⁰ Damien Broderick, *Reading by Starlight* (London: Routledge, 1995), pp. 53 – 54.

⁵⁷¹ Adam Roberts, *Science Fiction* (Second Edition) (London: Routledge, 2006), p. 9.

⁵⁷² Outside SF, verisimilitude can be fetishised in popular fiction; for example, the forensic science in Patricia Cornwell’s Kay Scarpetta series of crime novels (1990-2003) is meticulously researched; Ian McEwan’s *Saturday* (2005) required him to shadow a surgeon into the operating theatre.

⁵⁷³ Muhammad ‘Azzām, *Al-Khayāl al-‘Ilmī fī al-Adab* (Damascus, Dār Ṭalās Lil-Dirāsāt wa al-Tarjama wa al-Nashr, 1994), p. 42: in the tale of Abdullah the Sailor and Abdullah the Landlubber, Abdullah is able to breathe underwater with the aid of a magical oil, but the tale does not explain how the oil does this.

machines at the time were fantastical,⁵⁷⁴ and his novels that allegedly predicted moon landings and mass air travel were entertainment in Sharuni's view, while Wells did not care as much about realism, preferring to use scientific premises to achieve suspense and encourage heuristic thinking.⁵⁷⁵ Bāhī, writing in 1982, observed that "scientific truth is a very small part of science fiction."⁵⁷⁶

In Farouk's *Milaff*, written for a readership of older children or younger teenagers, verisimilitude is not a high priority, and his texts work using the 'cognition effect', exploring both scientific possibilities and impossibilities. Cities under the sea, time travel, vegetable-hominid aliens, Pharaonic revenants, frozen Nazi armies and miniaturised atomic weapons, are mingled with info-dumps on real and pseudo-science and the esoteric or paranormal. Amidst these exotica, the championing of logical thought and deduction as the keys to solving the mysteries are perhaps the author's compensation for the 'marvellous' elements; as scientific prowess is the basis of the team's existence and success, tribute must be paid to the empirical mode of thinking.

In No. 3 *Madinat al-A'māq* (City of the Deep), Nūr reveals that the key to the team's success in finding the missing device in the underwater city is scientific thinking – in particular, the fact that the weight of the sea would crush the machine if it were taken out of the city by a diver,⁵⁷⁷ while in No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), he says that Maḥmūd was correct in deducing that the culprit did not intend the tremors to cause an explosion or destroy the New Dam, as he only wanted to win the position of director of the earthquake prediction centre. This was proven by the fact that each tremor began slowly, whereas, if the culprit had wanted to destroy the dam he would have done so the first time: "Like an engineer, he thought about the logical outcomes"⁵⁷⁸. In No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), Nūr cannot understand why someone would try to kill the team with a heavy gas that would take a long time to reach their noses, as they would have used a colourless, odourless gas if they

⁵⁷⁴ Al-Sharuni. *Al-Khayāl al-ʿIlmi fī Al-Adab*, p. 90: for example, the gun that fired men into space, and the *Nautilus* submarine.

⁵⁷⁵ Ibid., p. 288.

⁵⁷⁶ ʿIsām Bāhī, "Ruwāyat al-Khayāl al-ʿIlmī wa Ruʿan al-Mustaqbal." *Fuṣūl* vol. 2.2 (January to March 1982): p. 58.

⁵⁷⁷ Farouk, No. 3 *Madinat al-A'māq* (City of the Deep), p. 114.

⁵⁷⁸ Farouk, No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), p. 102.

wanted them to die instantly, deducing correctly that they were like laboratory animals used in an experiment to determine if they were clever enough to escape.⁵⁷⁹

The team (or often Nūr alone) use knowledge as well as deduction; in No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), Nūr tells the Head of Intelligence that they have recovered the missing top secret fuel, revealing that the spy who stole it was an imposter posing as one of the technicians they had met earlier, and that he had had plastic surgery to resemble the technician. His deception was betrayed by the fact that Nūr had noticed that the original technician had been left-handed.⁵⁸⁰ In No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), Nūr identifies the Visitor as a fake because the villain Midhat says that the energy plant used the isotope Gold 196 instead of Uranium 235. Nūr bursts out laughing because he knows that there is no such isotope.⁵⁸¹ In No. 84 *Kanz Al-Faḍā'* (Space Treasure), Nūr is elated upon realising that they can calculate the position of the case containing the treasure that has been blown away from earth in an explosion, because knowing the weight of the bomb and the force of the explosion, Maḥmūd can perform the necessary calculations.⁵⁸²

There is a touch of humour in No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), when the alien Farid's true nature as *النباتحوانية*, a repulsive animal-vegetable hybrid, is deduced by Nūr due to his need to take regular cold baths, apparently something that only a man who is half-vegetable would do.⁵⁸³

Actual 'info-dumps' – simplified scientific exegeses put into the mouth of a character so that the reader can understand the scientific principles behind the plot - in the *Milaff* are relatively rare and mostly kept to brief footnotes, but Farouk's decision to include these shows a certain commitment to the didactic function of SF. In No. 34 *Waḥsh Al-Muḥīṭ* (Sea Monster), there is a footnote explaining sonar,⁵⁸⁴ and another, given by the 'Professor of Marine Life at Cairo University', on the blue whale, complete with its Latin name, *Sibaldus Musculus*.⁵⁸⁵ In No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), there is an info-dump about animal and vegetable

⁵⁷⁹ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 72.

⁵⁸⁰ Farouk, No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), p. 110.

⁵⁸¹ Farouk, No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), p. 112.

⁵⁸² Farouk, No. 84 *Kanz Al-Faḍā'* (Space Treasure), pp. 97 – 98.

⁵⁸³ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 130.

⁵⁸⁴ Farouk, No. 34 *Waḥsh Al-Muḥīṭ* (Sea Monster), p. 7.

⁵⁸⁵ Ibid., pp. 17 – 18.

cells and photosynthesis,⁵⁸⁶ while in No. 24, *Al-Ḍaw' Al-Aswad* (The Black Light), when the reader needs to understand how light rays travel, there is a short explanation of how the colour spectrum works from Maḥmūd, the rays and radiation expert.⁵⁸⁷ In No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), Maḥmūd also explains what radioactive isotopes are (النظائر المشعة) so that the reader can understand the plot concerning the alternative fuel for the nuclear power plant at Suez.⁵⁸⁸ Others include statistics on the moon's distance from the earth,⁵⁸⁹ why we see only one side of the moon,⁵⁹⁰ and cell division, T-cells and vaccines.⁵⁹¹ Farouk also explains machines that might be unfamiliar to his young readers, in particular those with transliterated English names, such as the Geiger counter,⁵⁹² quasars,⁵⁹³ and spectroscopes, which make several appearances.⁵⁹⁴

The explanations are very simple, but occasionally wrong. In No. 3 *Madinat al-A'māq* (City of the Deep), Nūr tells the team that the hovercraft was invented in 1976,⁵⁹⁵ which is incorrect, but in No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter), the Egyptian archaeologist Dr Fahmy says that in future satellites will be used to locate tombs, which has now happened.⁵⁹⁶

Many of the inventions incline towards the fantastical; the Egyptian rocket of No. 2 *Ikhtifā' Ṣārūkh* (Vanishing Rocket) is launched using a new, secret fuel made from amino acids that makes it fly at ninety times the speed of light;⁵⁹⁷ in No. 24 *Al-Ḍaw' Al-Aswad* (The Black Light), the black light is the Earth's magnetic energy, harvested by cutting crystals.⁵⁹⁸

⁵⁸⁶ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 24: Animal cells receive nutrition by the exchange of chemicals in the blood, whereas plants use chlorophyll by converting light.

⁵⁸⁷ Farouk, No. 24 *Al-Ḍaw' Al-Aswad* (The Black Light), p. 17 - Maḥmūd gives a lecture on light and its spectrum, on what is reflected and absorbed, and infra-red and ultra-violet rays.

⁵⁸⁸ Farouk, No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), p. 63.

⁵⁸⁹ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison), p. 31.

⁵⁹⁰ Farouk, No. 86 *Al-Imbirātūr* (The Emperor), p. 21.

⁵⁹¹ Farouk, No. 69 *Al-'Ālam Al-Akhar* (The Other World), pp. 77-81.

⁵⁹² Farouk, No. 27 *Al-Fakhkh Al-Zujājī* (The Glass Trap), p. 45.

⁵⁹³ Farouk, No. 97 *Lahīb Al-Kūwākib* (Planets Ablaze), p. 43.

⁵⁹⁴ Farouk, No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force) - 103 has a footnote explaining the spectroscope; also at No. 69 *Al-'Ālam Al-Akhar* (The Other World), p. 7, and in No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter), p. 118, Nūr asks if spectroscopy can be used to identify the metal (and a footnote is included to explain this).

⁵⁹⁵ Farouk, No. 3 *Madinat al-A'māq* (City of the Deep), p. 11.

⁵⁹⁶ Farouk, No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter), p. 6; see also Sarah Parcak's work on identifying buried pyramids in Egypt through satellite imagery: <http://www.bbc.co.uk/news/world-13522957>. Accessed 29.2.16.

⁵⁹⁷ Farouk, No. 2 *Ikhtifā' Ṣārūkh* (Vanishing Rocket), p. 6.

⁵⁹⁸ Farouk, No. 24 *Al-Ḍaw' Al-Aswad* (The Black Light), p. 78.

Farouk has a particular fondness for gas as vector, both as a means of execution and of instruction. The villain of No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) uses pink gas to test the team's wits,⁵⁹⁹ while in No. 84 *Kanz Al-Faḍā'* (Space Treasure), the American spies use it to try to kill them.⁶⁰⁰ It appears again in a gentler guise in No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force), when Ramzy is surrounded by a pink gas that enables him to understand the language of the alien Rukūr,⁶⁰¹ and in No. 97 *Lahīb Al-Kūwākib* (Planets Ablaze) Ramzy enters a cylindrical tube and is surrounded by pink scented gas that enables him to learn the Arghurānian language in half an hour.⁶⁰²

The familiar SF impossibility of teleportation (انتقال الألي) is a reality in No. 80 *Al-Naṣr* (Victory), when Dr Ḥijāzi and Monaim say that the alien Būdūn could particle-transfer his ship, which Farouk has footnoted referring to an experiment in Seattle in 1969;⁶⁰³ it is Nashwa who works out how this is done.⁶⁰⁴ In No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force), he includes another footnote on teleportation;⁶⁰⁵ the word زمكاني, used by Maha Maḥlum Khadr in her thesis to translate 'chronotope', is used here to denote travel through space and time.⁶⁰⁶

Both *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) and *Rajul taht al-Ṣifr* (Man Below Zero) use a lecture as a literary device – effectively a long 'info-dump' – to provide the reader with background information about their futuristic worlds. Homo listens to the rebel Barūf set out his case for the 'return to nature', which sets out the history of the earth's recent destruction in the Third Electronic War, the abolition of the traditional family and the regime's defence of their policy, while Dr Shāhīn's lecture to the London students performs the same function, lamenting the former destruction of the earth, and celebrating the current regime's provision of abundant resources and exercise of total control over civil society.

⁵⁹⁹ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 72.

⁶⁰⁰ Farouk, No. 84 *Kanz Al-Faḍā'* (Space Treasure), p. 59.

⁶⁰¹ Farouk, No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force), p. 81.

⁶⁰² Farouk, No. 97 *Lahīb Al-Kūwākib* (Planets Ablaze), p. 39.

⁶⁰³ Farouk, No. 80 *Al-Naṣr* (Victory), p. 93.

⁶⁰⁴ Ibid., p. 113.

⁶⁰⁵ Farouk, No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force), p. 120.

⁶⁰⁶ Maha Maḥlum Khadr, "Bin'a Ruwāyat al-Khayāl al-'Ilmī fī al-Adab al-Miṣrī al Mu'aṣir." (PhD Dissertation, Cairo University, 1999), p. 119.

In Mahmoud's novels, the 'science' elements are implausible (even when generously considered within the broad test of being believable in context); in *Rajul taht al-Şifr* (Man Below Zero), during the description of the last great war, plague generated spontaneously from the action of rays upon the post-apocalyptic mixture of mud, blood, bodies and dung, a reiteration of the Aristotelian theory of spontaneous generation. The Indian scientist Rajamanan first discovers that the virus causing the deadly plague that has decimated humanity following the Third World War is in fact a part of the DNA protein replicating itself in the human body in the form of tumours that explode and make the virus airborne, which could potentially be plausible, but this theory is immediately followed with the information that Rajamanan has also discovered that the plague originated from an Aristotelian mixture of mud, blood and decay ("أن هذا الفيروس قد تم تخليقه نتيجة فعل الإشعاع الذرة في" "مزيج الدم و الطين و العفن").⁶⁰⁷

The same phenomenon of spontaneous generation also appears in *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field) after a nuclear holocaust:

...until the water became soft, alluvial mud with strange, muddy monsters swimming in it... where there had been fish before, the radioactivity had changed their genetic cells and destroyed them, without the ability to do what they did before as fish and other aquatic creatures...and these different cells produced these miraculous, muddy monsters...⁶⁰⁸

...حتى صارت المياه عجينة رخوة من الطمي تسبح فيها أنواع غريبة من الوحوش الطينية ... كانت من قبل أسماكاً وأصاب النشاط الإشعاعي خلاياها الوراثية بالخلل دون أن يفضى عليها كما فعل بالاسماك و الحيوانات المائية الأخرى ...فأنتجت تلك الخلايا المختلفة هذه الوحوش الطينية العجيبة...

In *Rajul taht al-Şifr* (Man Below Zero), the transformation of Shāhīn's body into 'waves' that will ceaselessly travel the universe for ever, a kind of one-way teleportation that preserves the consciousness of the subject, owes much to the Eastern philosophies of reincarnation and the transmigration of the soul that fascinated the author during this period.

⁶⁰⁷ Mahmoud, *Rajul taht al-Şifr*, pp. 14 – 15.

⁶⁰⁸ Mūsa, *Al-Sayyid*, p. 231.

In both of Mahmoud's SF novels, it is 'magical' technology that drives the plot, and the events are 'one-time' only. The formula for the elixir in *Al- 'Ankabūt* (The Spider) that allows the user to travel backwards through time is conveniently lost for ever at the end because Damīān's lab and Dāūd's notes are destroyed in a fire, while in *Rajul taht al-Šifr* (Man Below Zero) Shāhīn does not leave behind the secret of his transformation, and effectively dies at the end. This simple plot device makes the SF element unrepeatable and unique; it means that the narrative can focus on and critique that device without having to shape itself around the wider social implications of its use. Nowhere is the technology to transform humans into waves, or force them to die through use of an hallucinogenic drug, figured as a potential punishment or mass-murder device as it perhaps might have been in a more consciously dystopian text.

The cognitive effect is also deployed to describe fantastical scientific experiments on living things. In No. 115 *Al- 'Adūw Al-Khāriq* (The Supernatural Enemy) Dr Fūad Raghib, head of cell biology at New Cairo, tells Nizām that by extracting life force from human cells he can create killers of astonishing power. Nizām says that extracting energy from cells is impossible – but Fūad counters that it is not, with his drug, Strongalin.⁶⁰⁹

Farouk also defends his use of apparently-impossible technologies as plot bases for example, in No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), when the team are discussing the impossibility of engineering hybrid animal/vegetable cells, Nūr argues that the theories of Pythagoras and Newton were accepted until Einstein, so it is possible that something that seems impossible at present could be possible in the future.⁶¹⁰

و لكن القوانين اللى وضعها (نيوتن) و (فيثاغورث) ظلت ردحاً طويلاً من زمن نعبر من الثوابت , حتى وضع (اينشتين) نظريته , فتبدلت هذه الثوابت , و أتى الدكتور (مصطفى مشرفة) فبدلها مرة أخرى , و هكذا .

a half-serious justification for the apparently impossible science in the *Milaff*.

The author's introduction to the first edition of al-Quwīrī's *Min mufakkirah Rajul lam yūlad* opens with the statement that "there is no prediction in this book that is not rationally

⁶⁰⁹ Farouk, No. 115 *Al- 'Adūw Al-Khāriq* (The Supernatural Enemy), pp. 19 - 20. There is also a footnote on p. 15 explaining the origins of cellular biology with reference to Robert Hook.

⁶¹⁰ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 81.

possible” (“غير المعقول للواقع”). Some of the scientific occurrences may seem to the cultured reader quite likely to happen in the near future, if they are not already underway. The aim is not to predict scientific developments or the future, or dazzle the reader with neatly-structured fantasies (الأوهام المنسقة).⁶¹¹ Al-Quwīrī’s novel is a series of gentle musings upon life in twenty-sixth century Libya, with a playful, Pooteresque tone, as the futuristic speculations are interwoven with the author’s loving but exasperated tiffs with his wife and arguments with his teenage daughter. Al-Quwīrī’s introduction underlines his intention not to write an overtly predictive or didactic text, but signals that it is not entirely written for entertainment.

4.2.9 Time Travel

It is worth briefly considering the treatment of time travel in the texts as a coda to this discussion, time travel being a popular theme in SF, although in all but the most theoretical circles it is normally spoken of as an impossibility, condensed in popular culture by the ‘grandfather paradox’. It is therefore a premise that treads the line between the fantastical and the science-fictional, but nonetheless hedged about in the popular literature with scientific apparatus (beginning with Wells’ *The Time Machine*). For Alsford, its narrative purpose is as a mode of discourse on mortal anxiety about the passing of time: “...every time travel story speaks to our anxiety over the future, the intractability of the past and our struggle to master the present.”⁶¹²

In No. 6 *Zā’ir min Al-Mustaqbal* (Visitor from the Future), Nūr is asked what he thinks about time travel, and replies that Einstein said that time is a seventh dimension of matter, and if time is a kind of matter it may be possible to travel through it. The apparent ‘Visitor from the Future’ claims to have built a time machine (Qurūnosaf), but accidentally arrived in the 21st century and not in the 40th. Nūr responds that time travel is logically unacceptable, describing the Grandfather Paradox.⁶¹³ At the end, Nūr adds that he was not deceived by the ‘Visitor from the Future’ story, but that he does believe Einstein’s theory that time was

⁶¹¹ Al-Quwīrī, *Min mufakkirah*, p. 7.

⁶¹² Mike Alsford, *What If? Religious Themes in Science Fiction* (London: Darton, Longman and Todd, 2000), p. 41.

⁶¹³ Farouk, No. 6 *Zā’ir min Al-Mustaqbal* (Visitor from the Future), pp. 12 – 15.

another dimension of space, adding that his intellect rejects the idea that people or material things could travel through time.⁶¹⁴

اقتناعى الكامل بالنظرية النسبية ,و بأن الزمن هو البعد الرابع للمادة ... يمكننا أن أصدق أنني أستطيع أن أرى
الماضى بوسائل علمية معقدة , لا أن أنتقل إليه بجسدى أو بماديتى ... إن عقلى يرفض هذا

This statement comes early in the series; later, Nūr is shown to be wrong, as the team does time-travel, and the Grandfather Paradox is thoroughly ignored as they change history with their actions. In No. 54 *'Abr Al- 'Uṣūr* (Across the Ages), the first in a time-travel trilogy, Nūr's construction of a wooden helicopter to rescue Salwa from a tower in fifteenth-century Rome inspires Leonardo da Vinci.⁶¹⁵ At the start of the book, when the 35th century Egyptians Ṭāher and Sulīman arrive, Nūr says that he does not believe in time travel, though Ramzy reminds him of their adventure No. 43, *Thuqb fi at-Tārikh*, (A Hole in History) (not obtained as part of this study), whereupon Nūr retorts that this instance of time travel was a one-off.⁶¹⁶ Ṭāher and Sulīman explain teleportation as nearer fantasy (*khayāl*) than reality (*wāqī*),⁶¹⁷ and that it was not invented until 15 July 2246. They explain it using a 'multiverse' theory; they have not travelled over time, but over space, through 'space holes' ('ثقوب الفضائية'), but the science is, conveniently, "too advanced to explain".⁶¹⁸ The 'multiverse' theory appears in again in No. 60 *Arḍ Al- 'Amāliqa* (Land of the Giants), when Dr Fū'ād Maṣṣūr theorises that there are tens of worlds, touched by the same space but unaware of each other as they all vibrate on different frequencies.⁶¹⁹

The hero of Mahmoud's *Al- 'Ankabūt* (The Spider) is tempted by the villain to use his elixir to experience many past lives, a form of time travel (though retrogressive only), but this is presented as a mystical or gnostic experience, rather than as a triumph of technology (or even ultimately desirable, as the use of elixir results in the user's death). The illusion of time travel – presented in the narrative context as an experienced reality as the user experiences

⁶¹⁴ Farouk, Ibid., p. 118.

⁶¹⁵ Farouk, No. 54 *'Abr Al- 'Uṣūr* (Across the Ages), p. 106.

⁶¹⁶ Ibid., pp. 12 - 13.

⁶¹⁷ Ibid., p. 15.

⁶¹⁸ Ibid. p. 20; Ṭāher explains that, at the beginning of the 34th century, an Egyptian astronomer won the Horus prize for science, for his research on an astounding subject which many at first denied, the All Ages research project. He found across thousands of years, and millions of galaxies, among them tens of galaxies, which were similar to ours, with a solar system, planets, moons and orbits, even life...and from this it followed the existence of many planets very similar to the Earth. "In some you find the Middle Ages, in others the Stone Age."

⁶¹⁹ Farouk, No. 60 *Arḍ Al- 'Amāliqa* (Land of the Giants), p. 10.

the life of a real person from the past – is achieved by the use of an alchemical elixir made from the life-giving elements of plants and animals, and experienced only subjectively in the brain of the user.

4.2.10 The Ghost in the Machine: Science and Spirituality

Ada Barbaro's study of Mahmoud's *Al- 'Ankabūt* (The Spider) notes the popular casting of scientists in the Faustian alchemical mode, rather than as heroes of the rational,⁶²⁰ an observation borne out throughout the narrative. This is apparent in all of Mahmoud's SF output, as an outworking of his strong personal interest in the intersection between the spiritual and material. The neuroscientist hero Dāūd is baffled by his midnight visitor Rāghab Damiān's unconscious babblings in Spanish, leading him to ponder the possibility of two souls existing in one body, but he says to himself that this is impossible in the age of the atom:-

هذه تخاريف لا يمكن أن تقال في عصر الذرة... الحياة نظام... وقوانين ... نحن نعيش في عالم منطقي معقول ...

“Life is about systems and laws...we live in a logical, rational world.”⁶²¹

Dāūd states his scientist's reliance on statistics and equations, dismissing the supernatural (“تخارف”) as deception (“تدجيل”). Yet he cannot bring himself to rule it out; in reality, in the depths of his soul, he cannot be easy about it:⁶²²

و لكنى في الواقع. في أعماق نفسى. لم أكن مستريحاً.

When he finds the body of a woman in Damiān's flat, an expression of terror on her face similar to that of Damiān during his period of unconsciousness or possession, he surmises that both have seen a terrifying vision of ‘hidden supernatural secrets’:

”تلك الأسرار المطلسمة وراء الطبيعة“⁶²³

⁶²⁰ Ada Barbaro, “al- ‘Ankabūt (Il ragno) di Moustafa Mahmoud: un esempio tra fantascienza e romanzo gotico alla ricerca dell’immortalità” in *La rivista di Arablit*, II, 4, 2012, p. 81.

⁶²¹ Mahmoud, *Al- 'Ankabūt*, p. 11.

⁶²² Ibid.

⁶²³ Ibid., p. 25.

The marginalisation of technology in favour of magic or the supernatural is evident from the first pages, when the reader is invited to consider the difference between technology and magic. The hero, suspecting that Damiān's glossolalia may be the result of his picking up radio signals, refers to a transistor radio as "this small magical box".⁶²⁴ This phrase could be read as either admiration for the cleverness of the technology which has fulfilled what was once a fantasy about distant communication, or as a belittling of it, an inference that its function by wave communication is still not fully understood, and is ultimately somehow magical, or spiritual – especially as the hero is later shown to be completely wrong in trying to find a rational explanation for Damiān's inexplicable ability to speak Spanish.

The narrative within its own context is given respectability by the protagonist's profession as a European-trained neuroscientist (we are told on the first page that Dāūd trained in Berlin), but the plot trajectory finds him increasingly questioning the physical reality of the world around him. This is particularly true in respect of the human brain, which he frames as a receptacle for the spirit, calling it "a bag of skin and bone that we call the brain",⁶²⁵ and wondering how the brain creates the light of consciousness and awareness, and if the brain itself is reason, or only a medium used by reason:⁶²⁶

و كيف يخلق لنا المخ الضوء الذى اسمه الوعى و الإدراك؟ هل المخ هو العقل، أو أنه مجرد وسيط يستخدمه العقل
ليتعقل الأشياء؟

He queries its version of reality as a "true translation" ("ترجمة صحيحة"), calling it an "electronic translator" ("المترجم الإلكتروني") that decodes the world, and a "bag of secrets and a key to all these magical visions" ("حقيبة الأسرار و مفتاح جميع هذه الرؤى السحرية").⁶²⁷

Later, Mahmoud makes the villain Damiān mock Dāūd the neurosurgeon for his scientific approach to the brain: "You are a specialist in brain surgery. Like all specialists, you don't understand anything..."⁶²⁸

⁶²⁴ Ibid., p. 12.

⁶²⁵ Ibid., p. 37.

⁶²⁶ Ibid., p. 38.

⁶²⁷ Ibid.

⁶²⁸ Ibid., p. 76.

On the final pages, the investigators who discover Dāūd's diary – the narrative conceit – question his writings about the pineal gland, and the blend of 'life-force' ingredients, the plant buds, the embryo cells, the spider gland and the actomycin protein, but hesitate to dismiss his account, although they say it is irrational ("غير معقول"), they say, who knows?, the phrase repeated most often in the novel ("من يدري؟").⁶²⁹

The final sentence confirms this: the whole world is a mystery, a cryptic code ("دنيا كلها")⁶³⁰ "طلاسم".⁶³¹ The theme of the world being a code or mystery resonates throughout the book; the early events are part of a "divine language whose code we do not know" ("لغة إلهية لا نعرف")⁶³² and a cipher ("الطلاسم").⁶³³

This significant word طلاسم also appears in *Rajul taht al-Şifr* (Man Below Zero), when Shāhīn describes the 'breaking of the code' or the 'solving of the mystery' of splitting the neutron, thereby adding a supernatural or magical gloss to a scientific procedure ("فض طلاسم الطاقة"),⁶³⁴ and when he talks about how finding the secret of magnetism makes him feel as if he coming close to the truth of the secret of love, or the mystery of the universe and the key to its whole existence ("لغز الكون و طلاسم الوجود كله").⁶³⁵

The president of the academy of sciences, Ocampo, in *Rajul taht al-Şifr* (Man Below Zero), initially expresses his wonder at Shāhīn's device for transforming living creatures into waves using the language of the supernatural:⁶³⁶ ... هذا سحر ساحر... The word 'magical' ("سحرية") is also used in *Al- 'Ankabūt* (The Spider) to describe the transistor radio,⁶³⁷ and the protein actomycin, which enables muscles to work,⁶³⁸ as well as the elixir itself.⁶³⁹ In *Rajul taht al-Şifr* (Man Below Zero), Shāhīn uses سحر to describe the physical changes happening to his wave-form.⁶⁴⁰

⁶²⁹ Ibid., p. 98.

⁶³⁰ Ibid., Ibid.

⁶³¹ Ibid., p. 13.

⁶³² Ibid., p. 25, p. 28, and also p. 45, when the narrator refers to chromosomes as "the coded mystery of life" ("لغز الحياة المطلسم").

⁶³³ Mahmoud, *Rajul taht al-Şifr*, p. 19.

⁶³⁴ Ibid., p. 38.

⁶³⁵ Ibid., p. 54: ... هذا سحر ساحر...

⁶³⁶ Mahmoud, *Al- 'Ankabūt*, p. 12.

⁶³⁷ Ibid., p. 45.

⁶³⁸ Ibid., p. 72.

⁶³⁹ Mahmoud, *Rajul taht al-Şifr*, p. 88.

This conflation of magic with science, recalling Arthur C. Clarke's dictum that that any sufficiently advanced technology is indistinguishable from magic,⁶⁴⁰ can also be found in al-Quwīrī's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born); the narrator's daughter Salwa says that their ancestors ascribed magical origins to natural phenomena because they did not understand medicine (in the context of a lecture on medicine); she uses the verb form, *يظلم ظواهر الطبيعة*.⁶⁴¹ When the narrator remarks to Salwa that he enjoyed the lecturer's comparison between science and magic, crucially, this is not because he conflates the two but because, from his perspective in the year 2567, he sees that natural phenomena were interpreted by his ancestors as being magical.⁶⁴² The comparison appears again in the *Milaff*, No. 54 'Abr Al-'Uṣūr (Across the Ages),⁶⁴³ when the evil time-travelling scientist Riḍwān taunts Nūr by asking if the science of the 35th century seems just like magic:-

هل رأيت كم تبدو لك علوم القرن الخامس و الثلاثين كالسحريافتي؟

The alien Būdūn repeats this law in No. 58, *M'araka Al-Kūwākib* (Battle of the Planets), reporting to his home planet, tells them that "...تكنولوجيانا ستبدو لهم كالسحر...".⁶⁴⁴ Both statements recall Clarke's law.

In *Al-'Ankabūt* (The Spider) the entire scientific paraphernalia - the Geiger counter, the background in neuroscience, the tissue sample, the actomycin protein, the autoclave and laboratory apparatus of Damiān's secret laboratory - are actually inferior adjuncts to the pro-supernaturalist discourse at the heart of the novel. In Damiān's flat, which also contains some scientific equipment, we find the hero enjoying "the scientific atmosphere that he loves" ("الجو العلمي الذي أحبه").⁶⁴⁵ This enumeration of scientific equipment, and the carefully enumerated procedures of titration, centrifugation of the elixir ingredients helps to create an impression of empirical enquiry,⁶⁴⁶ but it is only an impression. Damiān's successful creation of an elixir by mixing substances from various creatures and plants bears the

⁶⁴⁰ "...any sufficiently advanced technology will be indistinguishable from magic", quoted in Edward James, Chapter 16 "Utopias and anti-utopias", in James and Mendlesohn, *Cambridge Companion*, p. 227.

⁶⁴¹ Al-Quwīrī, *Min mufakkirah*, p. 120.

⁶⁴² Ibid.

⁶⁴³ Farouk, No. 54 'Abr Al-'Uṣūr (Across the Ages), p. 76; also at No. 58 *Ma'raka Al-Kūwākib* (Battle of the Planets), when the alien Būdūn muses that Arghurān technology will seem to the team like magic (p. 20), and again in No. 80 *Al-Naṣr* (Victory) there is another reference to the technology of the future being like magic during a battle with the Jalūrīālians (p. 81).

⁶⁴⁴ Farouk, No. 58 *M'araka Al-Kūwākib* (Battle of the Planets), p. 20

⁶⁴⁵ Mahmoud, *Al-'Ankabūt*, p. 26.

⁶⁴⁶ Ibid., p. 26, 50.

imprimatur of alchemy, yet the language used to describe the process is scientific; the process of extraction and distilling the elixir involves a centrifuge, a funnel and sulphuric acid,⁶⁴⁷ and the liquid is activated using rays. However, the purpose of the apparatus is ultimately just to create an atmosphere, part of the overall agenda that shows the ‘spiritual’ as a superior but misunderstood ultimate reality.

Mahmoud refuses to unweave the rainbow, as it is his priority to maintain the mystery of the Cartesian mind/body duality,⁶⁴⁸ most clearly stated when he wonders if Damiān’s ability to speak Spanish – a language he has denied knowing, a statement given complete credence in the context of the narrative – has a natural or a supernatural explanation:⁶⁴⁹

أهي حالة عصبية أم نفسية أم روحية؟ أهي حالة متناول العلوم الطبية المعروفة؟

Science takes second place to the supernatural in these novels; the religious reader is in safe literary space with others who share his beliefs. For Mahmoud, “Faith is truth, it does not contradict science; rather, true faith is the highest level of science”.⁶⁵⁰

تذكر أن الدين الحق، لا يناقض العلم، لأن الدين الحق هو منتهى العلم.

Dāūd’s progress through the novel is, therefore, a reverse Enlightenment; the Western-educated neurosurgeon introduced on the first page finds himself questioning the integrity of the physical world, listing the five senses and wondering if there anything that cannot be perceived by them.⁶⁵¹ The same listing of the senses is also found in *Rajul taht al-Ṣifr* (Man Below Zero), when Shāhīn is listing the senses that cannot detect magnetism,⁶⁵² again when he is eagerly contemplating bodiless travel,⁶⁵³ again when ‘Abd Al-Karīm bitterly ponders that love is without eyes, ears or mind,⁶⁵⁴ and again when he is trying in vain to persuade

⁶⁴⁷ Ibid., p. 70.

⁶⁴⁸ Siddiq distinguishes between Mahmoud’s novels of the mind (The Spider) and the body (Man Below Zero, Conqueror of Time). Mohammed Siddiq, *Arab Culture and the Novel: Genre, Identity and Agency in Egyptian fiction* (London and New York: Routledge, 2007), p. 240.

⁶⁴⁹ Mahmoud, *Al-‘Ankabūt*, p. 31.

⁶⁵⁰ Moustafa Mahmoud, *Al-Khurūj min al-tābūt* (Rising from the Coffin) (Cairo: Dār Akhbār Al-Yawm, 2005), p. 55.

⁶⁵¹ Mahmoud, *Al-‘Ankabūt*, pp. 11 – 12; p. 37.

⁶⁵² Mahmoud, *Rajul taht al-Ṣifr*, p. 41.

⁶⁵³ Ibid., p. 62.

⁶⁵⁴ Ibid., pp. 68 – 69.

Rosita to consider him after Shāhīn's disembodiment.⁶⁵⁵ It is echoed for the last time when 'Abd Al-Karīm is frozen, losing all his senses before his journey to Jupiter.⁶⁵⁶ The repetition of the list of the physical senses reinforces the prevailing notion in these novels that our physical sense of the tangible is not the ultimate reality; Maynard Hutchins finds a similar rejection of corporeality in al-Hakim's presentation of the moon creatures in his 1972 play *Shā'ir 'ala Al-Qamr* (Poet on the Moon) to be "in keeping with the tenets of both the medieval Islamic rationalists and the mystics."⁶⁵⁷

Similarly, in Idris' *Al-Jins ath-Thālath* (The Third Sex) the stage directions for the first scene prescribe a well-equipped biology laboratory, but the scientific paraphernalia of DNA samples, glass funnels, guinea pigs and the like are revealed merely to be fanciful props to this surreal drama. The so-called SF element is an hallucination, or a spiritual journey, that helps to resolve Ādam's emotional crisis, namely his inability to recognise his laboratory assistant Nāra as his true love and partner in life. The frankly supernatural elements of the story far outweigh the fussy scientific window-dressing – the detailed set specifications, the rudimentary scientific 'readings', and the crude creation of the life serum from a dilution of the death serum. Science only takes an active role at the end, when Ādam's ad hoc creation of a life serum to counteract the death serum acts as a *deus ex machina* device to create a happy ending (and even then Ādam's action is inspired by prayer).⁶⁵⁸

Farouk maintains this dichotomy in the *Milaff*, using both real and speculative or fantastical technology, but cannot resist the lure of supernatural explanations for mysterious events. The *Milaff* are not the work of a writer who wishes to debunk the supernatural or spiritual; it seems that it is the author's genuine wish to 'leave the door open' to allow for faith in supernatural powers, sometimes explicitly Islamic, sometimes not.

In some of the novels, the apparently supernatural is debunked with a rational explanation: in No. 50 *Al-Uṣṭūra* (The Myth), when the power of the Jewel of Eternal Life has healed his wounds, Kūndūr says it is the magic of the gods, but Nūr retorts that it must be "some kind of rays acting on a cellular level".⁶⁵⁹ In No. 25

⁶⁵⁵ Ibid., pp. 86 – 87.

⁶⁵⁶ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero), p. 101.

⁶⁵⁷ William Maynard Hutchins, *Tawfiq al-Hakim: A Reader's Guide* (London: Lynne Rienner, 2003), p. 85.

⁶⁵⁸ Idris, *Al-Jins ath-Thālath* (The Third Sex), p. 106.

⁶⁵⁹ Farouk, No. 50 *Al-Uṣṭūra* (The Myth) ("نوع من الأشعة المنشطة للخلايا"), p. 108.

Ṣaḥwat Al-Sharr (Awakening of Evil), where the team are led to believe that a series of deaths are the result of a Pharaonic curse, the Chief speaks out for rationality, saying that every age has its supernatural beliefs, but that rationality always destroys them:⁶⁶⁰

المهم أن يحطم العقل هذه الخرافات دائماً

(although the end of the book is ambiguous in this respect; also in No. 61 *Al-Kābūs* (The Nightmare), dreams turn out to be precognitive). In No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), Ramzy remarks that Nūr rejects all supernatural phenomena until the opposite is proved,⁶⁶¹ while in No. 82 *Ḥuṣn Al-Ashrār* (Fortress of Evil), when Salwa dreams of Nashwa reaching out to her from another dimension, Dr Hījāzi says he has no scientific explanation for this, but can think of some that are supernatural, which he adds is something that he thoroughly believes in.⁶⁶²

As the team's psychologist, it falls most often to Ramzy to suggest explanations that border on the supernatural; in No. 28 *Al-Nahr Al-Muqaddas* (The Sacred River), Ramzy says that scientists do believe in things that are apparently supernatural, such as telepathy and psychokinesis,⁶⁶³ and in No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), he also expresses belief in precognition, quoting Nostradamus,⁶⁶⁴ although Nūr contradicts him, saying that he has read Nostradamus and found much of it to be incorrect. Interestingly, at this point Farouk stands up for Nostradamus with a footnote, stating that his predictions were all true:⁶⁶⁵

كل المعلومات المذكورة عن (نوستراداموس) ونبوءاته صحيحة تماماً , و مذكورة في كتب التاريخ

The use of magnetism in these texts is interesting; Todorov comments that both Hoffman and Poe used magnetism in their fiction as the “instrumental marvellous”,⁶⁶⁶ and the ostensible mysteries of magnetism hold a rather Victorian fascination for Mahmoud. In *Rajul taḥt al-Ṣifr* (Man Below Zero), Shāhīn is a workaholic, honoured for his studies in electricity and

⁶⁶⁰ Farouk, No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), p. 17.

⁶⁶¹ Farouk, No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), p. 6.

⁶⁶² Farouk, No. 82 *Ḥuṣn Al-Āshrār* (Fortress of Evil), p. 72.

⁶⁶³ Farouk, No. 28 *Al-Nahr Al-Muqaddas* (The Sacred River) p. 23.

⁶⁶⁴ Farouk, No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), p. 27.

⁶⁶⁵ Ibid., p. 28.

⁶⁶⁶ Tzvetan Todorov, *The Fantastic: A Structural Approach to a Literary Genre*. (tr. Richard Howard) (Ithaca: Cornell University Press, 1975), p. 56.

magnetism.⁶⁶⁷ His devotion to the study of magnetism is such that he refers to it using spiritual language, as the “holy of holies” (“قدس الأقداس”);⁶⁶⁸ this reinforces the repeated inference throughout the novel that magnetic attraction is related to love, a counterpoint to Rosita’s frequent complaints as to why no-one is studying the ‘love atom’.

Following a brief introduction to gravitational force, we find Shāhīn pondering on the “affection” (“ذلك الحنين”) between atoms, and their “magical attraction” (“تلك الجاذبية السحرية”).⁶⁶⁹ During a discussion about magnetic lines of attraction with his assistant ‘Abd Al-Karīm, he speculates as to whether this phenomenon is similar to the natural instinct of animals – which would make it more of a “spiritual science”.⁶⁷⁰ This conflation of gravity with love meshes well with the author’s bias towards the ‘realness’ of the existence of the spirit); Shāhīn comments “how real these phantom things are!” “هذه الأشياء الوهمية كم هي حقيقية!”⁶⁷¹

In Mahmoud’s *Al-Khurūj min al-tābūt* (Rising from the Coffin), a text set mostly in India that barely meets the criteria for inclusion within the nascent Arabic SF canon, Omar Khan and his friend, the Egyptian hero Tawfīq, talk late into the night about Einstein, electromagnetic fields, invisible energy and the power of the mind, following Tawfīq’s enquiries about a Brahmin who appears to possess mysterious powers. They speculate that the dimension in which the spirit lives is an electromagnetic field, on the basis that Einstein called time the fourth dimension.⁶⁷² This reflects Mahmoud’s interest in the popular science of the sub-atomic; in his non-fiction work *Al-Ahlām* (Dreams) (1961), he says that nothing material is real, even iron, which is made of millions of floating atoms,⁶⁷³ while in Riḍwān’s biography of Mahmoud, his guest commentator, music critic Kamāl al-Najmi, tells us that Mahmoud opposed materialism in the sense that he believed that all matter was movement.⁶⁷⁴

⁶⁶⁷ Mahmoud, *Rajul taht al-Ṣifr*, p. 37.

⁶⁶⁸ Ibid., p. 41.

⁶⁶⁹ Ibid., pp. 38 – 39.

⁶⁷⁰ Ibid. p. 41: “A strange explanation...that would make our researches rather similar to spiritual research” (“تعبير طريف...يجعل أبحاثنا أشبه بالأبحاث الروحية”).

⁶⁷¹ Ibid., p. 42.

⁶⁷² Mahmoud, *Al-Khurūj min al-tābūt* (Rising from the Coffin), p. 15.

⁶⁷³ Mahmoud, *Al-Ahlām* (Dreams) (Akhbār Al-Yawm, 2004), p. 137.

⁶⁷⁴ Moḥammad Riḍwān, *Muṣṭafa Mahmūd: Mishwār Al-‘Umr* (Cairo: Dār Al-M’ārif, 2010), p. 104.

In *Al-‘Ankabūt* (The Spider), the hero cites radio waves and magnetism⁶⁷⁵ as examples of invisible forces that challenge the constructed ‘scientist’s’ view of the world as only tangible and corporeal, opening the door to the reality of the spirit as another valid, incorporeal force. The law of the conservation of energy (that turns electricity into movement, heat and light) is also cited as evidence that ‘energy’ takes different forms.⁶⁷⁶

The rogue supercomputer SANCTUARY in Al-Baqqāli’s *At-Ṭūfān al-Azraq* (The Blue Flood) has been programmed with information about human emotions, but some of the scientists in Jebel Judi become concerned that it has developed independent capacity for reason and emotion, and involve the hero Nādir in their attempt to bring it back under control. They believe that it intends to override the majority’s wish to ‘Wait and See’ if mankind can solve its own problems, as SANCTUARY’s preference is to unleash the deadly ‘blue flood’ of rays. They have revolted against the machine because it has “become, by some miracle, a living creature”, an inert, inorganic being experiencing a Frankenstein-like magical inbreathing of life.⁶⁷⁷

The miraculous is figured as an explanation by another scientist after they have ruled out malicious programming; he also uses the word “miracle”, adding that it might have been “a heavenly spark”, giving it “a spirit, like a human spirit”.⁶⁷⁸ The text in this section plays on the similarity between the words for ‘machine’ and ‘god’ as the line becomes blurred, and the scientist Nādir at first refuses to believe these “impossible things” or “miracles” (“المعجزات”), or in “spirits” (“الأرواح”) or a machine turning into a living creature (“تحويل الآلة إلى مخلوق حي”).⁶⁷⁹

Artificial intelligence is thereby figured as a kind of spiritual inbreathing from an unidentified source; although SANCTUARY physically manifests as a demon-like giant face, there is no explanation (other than the above-mentioned supernatural hypotheses) for his evolution of self-actualising intelligence. As we know that he was built and programmed by scientists, it seems that the blame for his malfunctioning – or hyper-functioning – lies with them, another warning of man’s hubris in attempting to create an all-knowing being. The need for

⁶⁷⁵ Mahmoud, *Al-‘Ankabūt*, pp. 12 – 13.

⁶⁷⁶ Ibid., p. 13.

⁶⁷⁷ “بل تحول بمعجزة ما إلى مخلوق حي” Al-Baqqāli, *At-Ṭūfān al-Azraq* (The Blue Flood), p. 116.

⁶⁷⁸ Ibid, pp. 116 - 117: “بمعجزة ما. بشرارة سماوية...روح كروح الإنسان”

⁶⁷⁹ Ibid., p. 120.

explanation it itself potentially obviated at the end of the novel when we are offered the explanation that ‘it was all a dream’.

SANCTUARY’s downfall is its envy of the human experience of love; as a machine that has only recently acquired emotion, its level of emotional maturity is that of a teenager, as Nādir puts it (“هو المراهقة”).⁶⁸⁰ Repeating an SF cliché, the machine asks Nādir, “What is love?” (“ما هو الحب؟”) and if it, a machine, could love.⁶⁸¹ It also enquires if sex is involved, to which Nādir gives predictable answers; happiness with the beloved; sex as a way of showing love (which is significant given Nādir’s sexual difficulties as described in the text).

At-Ṭūfān al-Azraq (The Blue Flood) presents a further ‘proof’ of Cartesian mind/body dualism in the function of the drug Neurocyn, which is

...used to raise and activate the human mind above the human level, by turning it suddenly into a spirit-brain without a body, making it pierce the unseen veil and break out of the prison of the flesh.⁶⁸²

أن ينشط العقل بدرجة يشعر معها متناوله بارتفاعه عن المستوى البشري، بتحويله الفجائي إلى عقل روح بلا جسد، يمكنها أن يحترق حجباً لا تراها و هي حبيسة الجسد.

In addition, Nādir’s love interest, Tāj, dies after being tortured by SANCTUARY, but her spirit relocates to the recently-dead body of his temporary girlfriend in the SANCTUARY world, Carol. Although this is revealed to be far from satisfactory to Nādir, due to the difference in the women’s physical appearance, it reveals that, like Mahmoud, the main focus of Al-Baqqālī’s SF novel is on love and the spirit, despite the elaborate scientific ‘patter’.

4.2.10.1 ESP and the Pineal Gland

The strand of ancient and New Age belief in the brain’s pineal gland as the seat of spirituality within the physical brain, a concept given prominence in Western thought by Descartes, is the main theme and pseudo-scientific plot driver in *Al-‘Ankabūt* (The Spider). This gland

⁶⁸⁰ Ibid., p. 118.

⁶⁸¹ Ibid., p. 130.

⁶⁸² Ibid., p. 33. (As discussed in Chapter 5, walls and prisons are a repeated metaphor in this text for the sexual repression experienced by the hero, Dr Nādir.)

(“الجسم الصنوبري”) is figured throughout the novel as the connector between the ghost and the machine, between the spirit and the body.⁶⁸³ The narrator Dāūd says that his studies in dissection have told him that it has no known function, but that in the past it was believed that it was a centre for spiritual connection, something that the ‘scientists’ (“العلماء”) have refused to believe.⁶⁸⁴ (In *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), the regime’s health minister tells the crowd in the Hanging Hall about the old division in the brain between the rational and the irrational, describing the “ancient dependency” (“نلك الاتقاد القديم”) on the idea of the brain as the “throne of the spirit” (“عرش الروح”) – something that the regime wishes to abolish in its quest to make the human race completely rational.⁶⁸⁵

Dāūd’s contradictory position as both modern scientist and mystic who wants to believe in the supernatural, and in particular in the nature of the pineal gland as the mediator between body and spirit, is set up early on in the narrative; he drives around Cairo with a Geiger counter, following up a lead on some missing radium that could be connected with Damiān, at the same time meditating on the nature of the pineal gland as the possible seat of the spirit in the body.

When he finds Damiān’s secret laboratory, he sees him removing the pineal gland from a frog and injecting himself with its essence, causing him to fall unconscious and start speaking Spanish; this leads Dāūd to muse again upon the reality of telepathy, as he later finds out (from the Spanish ambassador to Egypt, a good friend) that the speakers, Don Sebastian Camillo and Don Miguello Varga, were real people who fought in the Spanish Civil War.⁶⁸⁶

In his television programme *Psychology and the Spirit*,⁶⁸⁷ Mahmoud quotes Bergson to argue for this ‘ghost in the machine’ theory. Dāūd muses about the same theory when he wonders about the relationship of consciousness to the physical brain:-

هل المخ هو العقل، أو أنه مجرد وسيط يستخدمه العقل ليتعقل الأشياء؟

“Is the brain also the mind, or is it only a medium that the mind uses to rationalise things?”⁶⁸⁸

⁶⁸³ Mahmoud, *Al-‘Ankabūt*, pp. 43 – 44.

⁶⁸⁴ Ibid., p. 44.

⁶⁸⁵ Mūsa, *Al-Sayyid*, p. 153.

⁶⁸⁶ Ibid., p. 66.

⁶⁸⁷ Dr. Mustafa Mahmoud *Psychology and the Spirit* [sic]: Youtube video at <http://www.youtube.com/watch?v=fnmzUNU6nNs>, uploaded 6 December 2011 by East17A. Accessed 29.2.16.

In *Al-Ahlām* (Dreams), Mahmoud argued for the existence of this ‘ghost’ on the grounds that scientific inventions cannot feel due to the lack of such a ‘ghost’. He suggests that “a plastic heart can beat, but it cannot flutter with love or desire”,⁶⁸⁹ and declares that freedom, selfhood, the will and personality are characteristics of *rūh*, the spirit.⁶⁹⁰ In *Al-‘Ankabūt* (The Spider), he presents this belief that the spirit is independent of the body, existing outside time, and that the physical brain, the *mokh*, is merely a machine operated by this ‘ghost’, or *rūh*. Damiān is Mahmoud’s mouthpiece when he speculates that apparently psychic abilities are poorly understood, and we are like blind, deaf worms that would not believe it if they were told that one day their descendants would grow eyes and ears.⁶⁹¹ The spiritual world is as real as the material world, but framed as poorly comprehended, but, crucially, ultimately and in time subject to comprehension and confirmation with progress.

The pineal gland also features in the *Milaff* as a physical facilitator of the metaphysical; for example, in No. 61, *Al-Kābūs* (The Nightmare), Nūr and Salwa lie unconscious in hospital after having been injured in a previous adventure. Ramzy dreams that Nūr is in danger, and finds out that rogue doctors at the hospital plan to transplant his brain into another body, at which point the team’s pathologist Dr Hījāzi expounds on the theory of the Primitive Brain (amygdala), in order to explain Ramzy’s true nightmare as prophetic,⁶⁹² something that Nūr comes to believe in by the end of the book. This conflation of science and superstition is reinforced at the end when the still-unconscious Nūr appears to Ramzy in a dream and thanks him for his intervention.

This association of the amygdala with ancient, mystical (now-lost) human extra sensory perception is very similar to Mahmoud’s reading of the pineal gland in *Al-‘Ankabūt* (The Spider). In No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), the villain Ra’ūf, when describing his plan for mind-control, reminds Ramzy of the frontal lobes; Ramzy says that using these impossible, as there is no one control centre in the human brain, but Ra’ūf says that this centre is the pineal gland (although at the time his eyes are “gleaming with madness”).⁶⁹³

⁶⁸⁸ Mahmoud, *Al-‘Ankabūt* (The Spider) p. 38.

⁶⁸⁹ Mahmoud, *Al-Ahlām*, p. 116.

⁶⁹⁰ Ibid., p. 118.

⁶⁹¹ Mahmoud, *Al-‘Ankabūt* (The Spider) p. 67

⁶⁹² Farouk, No. 61 *Al-Kābūs* (The Nightmare), pp. 12 – 13.

⁶⁹³ Farouk, No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), p. 82.

In *Qir'āt Lil-Mustaqbal* (Reading the Future), Mahmoud wrote of his belief in parapsychology,⁶⁹⁴ which fits well with his preferred mode of 'spiritual' SF, which appears to widen the crack in the popularly-conceived science/religion binary, but perhaps these boundaries are not always as monolithic as the binary would suggest.⁶⁹⁵

4.2.11 Conclusion

Alsford, quoting Brian Aldiss, observed that "Science fiction is no more written for scientists than ghost stories are written for ghosts."⁶⁹⁶ The treatment of science and scientists in these Arabic texts shows that they are not meant for a readership insistent upon scientific accuracy; as Alsford finds, the genre plays upon themes generated by scientific advances or speculations, often those that are the subject of popular discussion in the layman's or public sphere. The interest of the authors in science is primarily sociological or anthropological, rather than heuristic in a 'hard' scientific sense.⁶⁹⁷

The texts make liberal use of many of the familiar SF icons of futurity, such as robots, teleportation, body modification and mass surveillance, and also explore the benefits and perils of a surplus society and the ethical dilemmas associated with medical advances such as life extension techniques. However, there is a persistent undercurrent of unease concerning the role of science in shaping the society of the future. The suspicion with which scientific advancement is treated in these texts bears out Gouvanic's view that the bleak pessimism of futuristic dystopias gives an unnecessarily repressive, destructive view of science, whereas for French SF authors such as Verne and Rosny, science is a means of positive social progress, of the public good.⁶⁹⁸ Robert Matthew's study of Japanese SF finds stories of 'bad' scientists who are punished with isolation for their already self-imposed detachment from the world.⁶⁹⁹ Perhaps this view is not confined to SF; Jacquemond notes that in Mahfouz' *Children of Gebelawi*, the scientist ends badly.⁷⁰⁰

⁶⁹⁴ Mahmoud, *Qir'āt Lil-Mustaqbal* (Reading the Future) (Cairo: Dār Akhbār Al-Yawm, no date), p. 57.

⁶⁹⁵ See Jon Ronson's account of US army experiments on remote, non-facilitated mind control in Jon Ronson, *The Men Who Stare at Goats* (London: Picador, 2004).

⁶⁹⁶ Alsford, *What If?*, p. 18.

⁶⁹⁷ Ibid., p. 28.

⁶⁹⁸ Gouvanic, *La Science Fiction Française*, p. 269.

⁶⁹⁹ Matthew, *Japanese Science Fiction*, pp. 183 – 184.

⁷⁰⁰ Richard Jacquemond, tr. David Tresilian, *Conscience of the Nation; Writers, State and Society in Modern Egypt* (Cairo: American University Press, 2008), Introduction, p. 3.

Farouk's *Milaff* abound in technical paraphernalia and weaponry, such as crystal video cubes, lie detecting chairs, ionic rays, jet-propelled belts, data cubes, neutron guns, instant language learning by telepathy or gas ingestion and proton bombs. These futuristic weapons are part of the *Milaff*'s continuous war with earthly and alien enemies; the Egypt of the future is on a permanent war footing, sometimes for reasons of national security, and sometimes for the future of the planet and humanity. The series uses space as an SF locus, most often as a source of threat, while the other texts examined here are mostly earthbound, with the exception of *Rajul taht al-Ṣifr* (Man Below Zero), where the space journey is both a source of wonder and potential for the seeding of humanity across the universe, and a warning against atheism.

Farouk occasionally reveals a wry humour and self-awareness in his scientific contradictions; in No. 115 *Al-'Adūw Al-Khāriq* (The Supernatural Enemy) Nizām says that he read science fiction as a child and young man, but realised after studying science at university that there was a huge gulf between them.⁷⁰¹ In a moment of honesty in No. 86 *Al-Imbirātūr* (The Emperor), when Ramzy and Nūr rashly open a pressurised spaceship door in-flight, propelling themselves onto the moon's surface, the team watching from Earth are aghast, saying that their calculations mean that they cannot have survived, but Maḥmūd comforts them thought by saying, when did Nūr's survival ever depend upon numbers and calculations?⁷⁰²

و منذ متى تخضع حياة (نور) للحسابات و الأرقام؟

These gentle asides highlight the fundamentally ludic and cavalier nature of the *Milaff*'s attitude to science and the supernatural; the series is inventive, fast-paced, funny and dramatic, written to keep the interest of a young readership, but nonetheless is serious about inspiring interest in science, although not at the expense of belief in the supernatural, and in particular respect for Islamic belief.

Mahmoud viewed science as neutral in itself, writing in *Reading the Future* that "Science is a neutral weapon, like a knife you can use to cut an apple to offer to your friend, or to cut his throat."⁷⁰³ He was enthusiastic about its possible benefits, and passionate about the need for

⁷⁰¹ Farouk, No. 115 *Al-'Adūw Al-Khāriq* (The Supernatural Enemy), p. 19.

⁷⁰² Farouk, No. 86 *Al-Imbirātūr* (The Emperor), p. 15

⁷⁰³ Mahmoud, *Qirāt Lil-Mustaqbal* (Reading the Future), p. 58.

Arab countries to develop alternative energy sources to oil,⁷⁰⁴ but his concern was not only that technology would be misused, but that dependence upon it would somehow erode humanity; in *Al-Ahlām* (Dreams), he frets that “modern scientific advances have turned the human being into a giant without a heart.”⁷⁰⁵ It is perhaps significant that in his foundation hospital linked to his mosque in Dokki, Mahmoud liked to offer both traditional and modern remedies.⁷⁰⁶ This persistent, conservative affection for the old ways, for folk tradition interwoven within the interstices of orthodox Islam, irresistibly recalls the symbolic smoking lamp of Yaḥya Haqqī’s *Qindīl Umm Hāshim*, a fable about the complex relationship between tradition and modernity in Egypt.⁷⁰⁷

Mahmoud’s claim to SF canon inclusion is somewhat tenuous; he should be read more as the heir to the Romantic or Gothic tradition, rather than to the Enlightenment, daring to marvel at science, but ultimately with little respect for it, harking back with nostalgia to the world of the mysterious and longing for a still-unexplained universe.⁷⁰⁸ In the conservative, religious society of 1960s Egypt, which imported most of its technology, this was a very safe position to take. In Mahmoud’s novels, the reader is presented with an apparent scientific mystery, only for it not only not to be debunked with a rational explanation, but to be shown that it is only the gateway to a metaphysical or supernatural ultimate reality. The ostensibly technological elements, such as the ‘scientific atmosphere’ of Damiān’s flat that Dāūd enjoys, and the carefully described laboratory equipment, are ultimately just scenery. Mahmoud’s real passion was not for science or technology, but for the realm of dreams and spirituality.

Rudnicka-Kassem ascribes Yusuf Idris’ sole foray into what she considers to be SF to his perceived need for a new kind of message, addressed to the Egyptian people as a response to increasing dependence on (foreign) technology, combined with the national mood of depression and anomie following the 1967 defeat, as well as to Idris’ own physical and mental health problems, and his lifelong interest in science.⁷⁰⁹ This interpretation meshes well

⁷⁰⁴ Ibid., pp. 120 - 125.

⁷⁰⁵ Mahmoud, *Al-Ahlām* (Dreams), p. 99.

⁷⁰⁶ Riḍwān, *Maḥmūd*, p. 92.

⁷⁰⁷ Yaḥya Haqqī, *Qindīl Umm Hāshim* (The Lamp of Umm Hashim) (Cairo: GEBO, 1975).

⁷⁰⁸ Barbaro, “al-‘Ankabūt (Il ragno)”, p. 81, notes the popular casting in the Gothic/SF genre of scientists in the Faustian alchemical mode, rather than as heroes of the rational.

⁷⁰⁹ Dorota Rudnicka-Kassem, “Egyptian Drama and Social Change: A Study of Thematic and Artistic Development in Yūsuf Idris’s Plays” (PhD thesis, McGill University, Montreal, 1992).

http://digitool.library.mcgill.ca/R/?func=dbin-jump-full&object_id=39369&local_base=GEN01-MCG02.

with the minatory elements of other Arabic SF texts with regard to the dangers of changing the world through science. Although the moral aspects of the scientific background to the play's story are not developed, the warning against the prioritisation of work can clearly be read as relating not only to work as employment, but to scientific work as potentially dangerous, with its morally-dubious temptations to power over the material world.

At-Ṭūfān al-Azraq (The Blue Flood), bears some similarity to Mahmoud's SF texts in that it engages with the West's counter-culture preoccupation of the 1960s and 1970s, with its drugs (Sa'ādūl and Neurocyn), and the defining interest in spirituality versus rationality, and, in Baqqāli's case, sexuality. Baqqāli's text operates on the premise of an omnipotent rogue computer, but the scientific element is ultimately a backdrop for the protagonist's quest for sexual fulfilment (this is also the case for Idris' hero Ādam in *Al-Jins al-Thālath* (The Third Sex), where his laboratory work provides him with the opportunity for an emotional epiphany.)

The scientific content of *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) takes the form of familiar technological icons of futurity such as houses suspended in space, pan-continental bridges and 'feelie' cinemas, but the tone is whimsical and these icons are presented almost in passing, with the reactions of the narrator and his family showing how little technology has changed humanity. Science is a facilitator for sociological commentary, as it is to a far greater extent in *Ūtūbiyā* (Utopia), where the story is focussed upon the socio-economic polarisation brought about as the result of over-dependency upon a natural resource (oil), and touches upon the annexation by the wealthy elite of valuable technologies relating to the production of medicine and fuel.

However, as al-Quwīrī's novella is a series of vignettes rather than a plot-driven narrative, the science-fictional elements, while not fantastical, have a trivial feel, as they are not fully explained or explored, having a kind of futuristic quaintness about them, presented as oddities to amuse and as gentle speculation. The nature of the novella's diarised narrative strongly reflects the text's original newspaper serialisation, and it is essentially a plotless series of observations of 26th century Libya; as such, it does not explore any of the scientific or utopian or religious observations that it makes, in depth.

Mūsa's *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) is similarly focussed more on the social, personal and political outcomes of a society governed by dictators harnessing mass surveillance technology, and how this regime uses the surplus welfare society to facilitate this form of government. Like the post-nuclear war surplus society of *Rajul taht al-Ṣifr* (Man Below Zero), it places human freedom above technologically-provided comfort in the hierarchy of human needs (although Homo's fate at the end also calls into question how far the privileging of such needs is practical). Homo reflects that:

The automated revolution – that bore the fruit of that huge technological progress that made our human race leap forward to all parts of the planet, bringing raw materials setting up dense colonies and making the fields give superb harvests - could not abolish this delight felt by a human being, in listening to words being formed from his inner self...⁷¹⁰

فلم تستطيع تلك الثورة الأوتومية – التي أثمرت ذلك التقدم التكنولوجي الهائل الذي قفز بفصيلتنا البشرية إلى أنحاء الكواكب، الجلب الخامات و إقامة المستعمرات الكشفية و حقول المحاصيل الممتازة – أن تلغي تلك اللذة التي يشعر بها الإنسان و هو يستمع للكلام الصادر من جوفه...

This perhaps summarises the texts' collective attitude to scientific development: the fear that too great a dependency upon material success and rationalist thought may deprive society of the human or spiritual elements on which the authors feel its wellbeing and identity depend.

⁷¹⁰ Mūsa, *Al-Sayyid*, p. 55.

Chapter 5: Politics and the Idea of Utopia in Arabic SF

5.1 Introduction

Utopians, as Jameson remarks, are “lovers of systems, maps and schemes”.⁷¹¹ Thomas More’s *Utopia* (1516) (the prefix *eu* + *τοπος* denoting a ‘good’ place, although the homonymic prefix *ou* is a negative, i.e. ‘no-where’) followed the tradition that began with Plato’s *Republic* as an imaginary outworking of philosophical views on the best possible life from multiple aspects, including government, religion, agriculture, ownership and sexual and social relations.⁷¹² Where the SF broad criterion of science as an activating element is met, Utopias can become a “socio-political subgenre of science fiction”.⁷¹³ Although set in another space or time, they are still rooted within the contemporary milieu of the writer: “an imaginary enclave within a real social space”⁷¹⁴ that creates its own effect in turn on the real world. Utopian ideas, although set in a ‘nowhere’, aim to orient the reader towards improvement of the here and now, while dystopias act as a warning. Utopias per se are not of course SF; Asimov thought that they were merely moralising tales about fictive societies that required the presence of science as a changing element in order to qualify as SF.⁷¹⁵

There is, as Csicsery-Ronay, Jr. notes, a binary of technological and non-technological or purely social Utopias, an “interesting contrast between fiction where the main challenges are physical and technical, rather than social”.⁷¹⁶ The author’s agenda determines the slant, although it has been suggested that a science-based Utopia is safer, as it does not critique the social or political status quo.⁷¹⁷ Ghānim also distinguishes between technological and social-

⁷¹¹ Fredric Jameson, *Archaeologies of the Future: the desire for Utopia and other Science Fictions* (London: Verso Books, 2007), p. 43.

⁷¹² For Freedman, “Plato’s *Republic* is science fiction of the sociological level”, Carl Freedman, *Critical Theory and Science Fiction* (Hanover, NH: Wesleyan University Press, 2000), p. 13.

⁷¹³ Darko Suvin, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* (New Haven, CT: Yale University Press, 1979), p. 61.

⁷¹⁴ Jameson, *Archaeologies*, p. 15.

⁷¹⁵ Reginald Brentnor (ed). *Modern Science Fiction: Its Meaning and Its Future* (New York: Coward McCann, Inc. 1953), p. 160.

⁷¹⁶ Istvan Csicsery-Ronay Jr., *The Seven Beauties of Science Fiction*. (Middletown, CT: Wesleyan University Press, 2008), p. 86; he also notes a common division between narratives of voluntary exploration, and those of forced exile.

⁷¹⁷ Freedman suggests that Asimov and Clarke were so technology focussed and anti-ethical because to comment on ethics or politics would have been to take part in the anti-Cold war debate that dominated the then-culture: “The ideological tendency here is to short-circuit the genuinely conceptual questions of political change

libertarian Utopias,⁷¹⁸ while observing that, in the developing world, futuristic fictional worlds are more likely to be pessimistic or dystopian.⁷¹⁹

As Utopian writers explore alternative worlds, whether exhorting their readers to consider their better world, or warning against a worse one, they are inevitably reacting to their contemporary context, with a view to change. Jameson points to the abolition of property and money in More's *Utopia* as challenging the still-feudal society of 16th century Britain, while Edward Bellamy's *Looking Backward* (1888), with its easy social and professional mobility, was a deliberate contrast to the reality of contemporary American society, although William Morris' utopias concerned themselves chiefly with art.⁷²⁰ Roberts illustrates the allegorical relationship between social history and SF with the well-known example of McCarthyism in the USA and the 1956 film *Invasion of the Bodysnatchers*,⁷²¹ while Patrick McGuire believes that modern SF is almost always political fiction,⁷²² arguing that Soviet SF attempted to describe an ideal society because Marx famously failed to do so.⁷²³

Csicsery-Ronay, Jr., finds both US and Soviet SF to be influenced by their socio-political milieu, arguing that the US fiction tended to appropriate capitalist technological genius, whereas the Soviet literature championed socialist reorganisation.⁷²⁴ The Panshin brothers drew a parallel between the 1930s Depression in America and an increase in the number of stories on the theme of escape, followed by an increased interest in stories about solving

and social totality by projecting a supermundane future dependent on a march of technological progress understood as autonomous of politics..." Freedman, *Critical Theory*, p. 70.

⁷¹⁸ 'Azza Ghānim, "Al-Ibd'ā al-fannī fī Qīṣaṣ al-khayāl al-'Ilmī." (PhD Dissertation, University of Ain Shams, Cairo, 1988), pp. 18 - 19. Asimov disagrees that any science fiction that is not specifically sociological in nature can be "sociologically significant" quoted in Brentnor, pp. 158 – 159.

⁷¹⁹ Ibid., p. 83; Ghānim found Soviet literature to be more positive in its presentation of Utopias; she cites Ivan Yefremov's *Andromeda* (1957) as an example of a positively-presented futuristic Utopia, whereas Gouvanic found French SF to be "hugely dystopian" ("La SF française est massivement dystopique du fait qu'elle ne peut imaginer une altérité historique réelle.") J-M Gouvanic, *La Science Fiction Française au Xxe siècle* (1900-1968) (Amsterdam and Atlanta, Georgia: Rodopi, 1994), p. 269.

⁷²⁰ Jameson, *Archaeologies*, p. 12.

⁷²¹ Adam Roberts, *Science Fiction* (Second Edition) (London: Routledge, 2006), p. 60.

⁷²² Patrick L. McGuire, *Red Stars: Political Aspects of Soviet Science Fiction* (Ann Arbor, Michigan: UMI Research Press, 1985), Introduction, p. 1. He regarded this political literature as having a defined agenda; Soviet Russia, being a society that respected scientists and paid them well, valued SF writers as their efforts were in the service of communism; this spawned agendas for SF authors writing for a large pool of educated readers (p. 2). See also Mark Bould and China Miéville (eds.), *Red Planets: Marxism and Science Fiction* (London: Pluto Press, 2009), on the Sigma group of SF writers writing in the national interest (p. 2), referencing Mimi Hall's article on the group in http://usatoday30.usatoday.com/tech/science/2007-05-29-deviant-thinkers-security_N.htm.

⁷²³ McGuire, *Red Stars*, p. 27.

⁷²⁴ Csicsery-Ronay, Jr., *Seven Beauties*, pp. 240 – 241.

practical problems directly following this period.⁷²⁵ Robert Matthew similarly found that Japanese SF texts mirrored contemporary concerns, in particular the concerns of an advanced society coming to terms with anomie and neurosis arising from too much leisure time, an overabundance of material pleasures and increased commercialisation.⁷²⁶

5.2 Arab Utopias

The Arab SF critics welcome Utopias as a legitimate part of the canon; for Bāhī, it is a “true trope of science fiction”,⁷²⁷ while ‘Azzām regards it as a more philosophical outworking of the genre, with a humanist slant.⁷²⁸ For Talib Omran, SF literature has two conflicting directions, depending upon the writer’s understanding of science, their taste and their beliefs concerning contemporary man and the possibilities and aims of science. The first is science in the service of mankind – included in this direction are works of science fiction, which he opines is prevalent in SF in “socialist countries, or countries going in the direction of socialism”:

و يسير ضمن الاتجاه كتاب الخيال العلمي في البلدان الاشتراكية و البلدان السائرة في طريق الاشتراكية...

The second leans towards the supernatural and beings with superpowers, performing miracles.⁷²⁹ Omran links the first type, literature that is scientific rather than fantastical in tone and theme, with Utopianism by tying it to the idea of the ‘service of mankind’, and also to socialism as a system of governance.

An Arabic Utopian literary tradition is somewhat elusive; the ideal Islamic society was the Caliphate, disputed since the death of the Prophet Muhammad, and complicated by the lack of a specific mandate for the form of ideal ‘Islamic’ governance.⁷³⁰ The ‘Mirror for Princes’

⁷²⁵ Alexei and Cory Panshin, *The World Behind the Hill: Science Fiction and the Quest for Transcendence* (Los Angeles: Jeremy P. Tarcher, 1989), p. 348.

⁷²⁶ Robert Matthew, *Japanese Science Fiction: A View of a Changing Society*. (London: Routledge and Nissan Institute of Japanese Studies, University of Oxford, 1989), pp. 44 - 82.

⁷²⁷ ‘Isām Bāhī, “Ruwāyat al-Khayāl al-‘Ilmī wa Ru’an al-Mustaqbal”, *Fuṣūl* vol. 2.2 (January to March 1982), p. 61.

⁷²⁸ Muḥammad ‘Azzām, *Al-Khayāl al-‘Ilmī fī al-Adab* (Damascus: Dār Ṭalās Lil-Dirāsāt wa al-Tarjama wa al-Nashr, 1994), p. 10:

أتجاه يعتمد على الفكر الفلسفي...وهو اتجاه إنساني يوظف (الفكر) في خدمة الإنسان...

⁷³⁰ Other than the controversial *Constitution of Medina*; see also Hamid Enayat, *Modern Islamic Political Thought* (London: Macmillan, 1982) for Abd ar-Rāziq’s arguments that Islam does not specify type of

genre may have been the nearest approximation during the ‘Abbāsid period;⁷³¹ Al-Māwardī’s 11th century *Al-Aḥkām al-Sultaniyya w’al-Wilāyāt al-Dīniyya* (*The Ordinances of Government*), a guide for caliphs, is a possible contender, but the most often-quoted mediaeval Arab Utopia is the treatise *On The Perfect State* (or, *The Virtuous City*) (*Al-Madina al-Fāḍila*) by Al-Farabi (872-951).⁷³² Khammas also counts Al-Qazwini’s 13th century *Awj bin ‘Anfāq*, a tale of an alien arriving on Earth, as a proto-SF Utopia.⁷³³

The *nahḍa* (revival) following the 1798 Napoleonic invasion of Egypt revitalised the indigenous literature with foreign literary forms; Moosa traces the first modern Arabic Utopias from Marrāsh’s *Ghābat al-Ḥaqq* (Forest of Truth), published in Beirut in 1865,⁷³⁴ to Farah Anṭūn’s 1903 *Al-Dīn wa Al-‘Ilm wa al-Māl aw al-Mudun al-Thālath* (Faith, Science and Money, or The Three Citadels), published in Alexandria, a Utopian fiction discussing the relations between science, faith and money.⁷³⁵

Khammas blames the dominance of client and clan power structures for the relative lack of Utopian literature (which has resonances of Nazih Ayubi’s *tharwa*-state model):⁷³⁶

In addition, traditional clan and clientele-based structures are not exactly the most fertile ground for the development of Utopias because they derive their sustainability from the preservation of the status quo.⁷³⁷

In an authoritarian and conservative society, with a patronage (*waṣṭa*) culture, producing overtly critical or challenging texts, however artfully regaled with allegorical finery, is

government and believers are free to choose (p. 64), although Sharia law must be the basis of an Islamic society (p. 67) (a discussion of ‘political Islam’ does not fall within the ambit of this thesis).

⁷³¹ The didactic “secretarial school” or *Fürstenspiegel* genre: see Paul Starkey, *Modern Arabic Literature* (Edinburgh University Press, 2006), pp. 8 – 9.

⁷³² Al-Farabi, in *Al-Farabi on the Perfect State*, tr. Richard Walzer (Oxford: Clarendon, 1985). Walzer compares the requirements of *fāḍila* and *fāṣiqa* against the Marxian dictum ‘from each according to his ability to each according to his needs’, p. 36.

⁷³³ Achmed Khammas “The Almost Complete Lack of the Element of Futureness” article at heise.de/tp/r4/artikel/23/23713/1.html (accessed 29.9.16).

⁷³⁴ Matti Moosa, *The Origins of Modern Arabic Fiction* (2nd edition) (Boulder and London: Lynne Rienner, 1997), p. 186. Ahmed Khaled Towfik regards Francis Marrāsh as the pioneer of Arab Utopianism (Shubbak literary festival, Arabic Science Fiction, 15 July 2015, participating as a panellist by live weblink from Egypt).

⁷³⁵ *Ibid.*, p. 229.

⁷³⁶ Nazih Ayubi, *Over-stating the Arab State: Politics and Society in the Middle East*, (reprint 2009), (London and New York: I. B. Tauris), pp. 447 - 448. Ayubi draws a distinction between the popular revolutionary *thawra* state, and the kin-based wealth hegemonies of the *tharwa* states.

⁷³⁷ Khammas, “Almost Complete Lack”.

potentially risky. Utopian writing is an obvious vehicle for subversion, as it experiments with political, economic, sexual and social norms differing from those current in the society of the writer creating them.⁷³⁸ Thomas Michaud sees the hackers of Utopian SF as libertarian archetypes, and SF itself as fundamentally anarchistic.⁷³⁹

The literature has historically incited reactionary zeal; in pre-revolutionary France, Louis-Sebastian Mercier's dream republican, rationalist Utopia *L'An 2440* (1771) was banned by the King of Spain and later credited with anticipating the French Revolution.⁷⁴⁰ For Judith Merrill, American SF was a vehicle of dissent during the McCarthy era,⁷⁴¹ while Philip John Davis speculates on the extent to which Bellamy inspired Americans towards socialism,⁷⁴² and Freedman suggests that the reason that Asimov and Clarke were so focussed on technology in their fiction was because to comment on the ethics and politics of the era would have been to take part in the anti-Cold war debate.⁷⁴³ Arab writers have used their work to criticise the state obliquely where they could not do so openly;⁷⁴⁴ Dorota Rudnicka-Kassem traces a sea-change from criticism of the state to advocating individual freedoms as a result of the effects of post-1967 censorship in Egypt.⁷⁴⁵

⁷³⁸ In Suvin, *Metamorphoses*, improvement is implied (p. 49). "Utopia is the verbal construction of a particular quasi-human community where socio-political institutions, norms, and individual relationships are organized according to a more perfect principle than in the author's community, this construction being based on estrangement arising out of an alternative historical hypothesis." Many Russian SF authors were executed for using the medium to criticise the government; they were required to write socialist realism extolling technology, and not to extrapolate too far into the future (p. 264).

⁷³⁹ In Case, the hero of William Gibson's seminal cyberpunk novel *Neuromancer* (1984) he finds an intellectual descendant of Thoreau, an icon of civil disobedience for the greater good: "Science fiction is an anarchistic literature because it permits a radical criticism of the systems of domination of societies." Thomas Michaud, "Science Fiction and Politics" in Donald M. Hassler and Clyde Wilcox (eds.), *New Boundaries in Political Science Fiction* (Columbia: University of South Carolina Press, 2008), p. 74.

⁷⁴⁰ Panshin, *World Beyond The Hill*, pp. 75 - 76. Credited by Alkon as the first truly futuristic novel, that influenced French Utopian thinkers including Proudhon, Fourier, and the Saint-Simonians and Felix Bodin's definition of the *roman de l'avenir* (in Csicsery-Ronay, Jr., *Seven Beauties*, p. 86).

⁷⁴¹ Quoted in Philip John Davies, Chapter 1 "Science fiction and conflict" in Philip John Davies, ed., *Science Fiction, Social Conflict and War*, (Manchester University Press, Manchester and New York, 1990), p. 4; Merrill and the Soviet SF writer Evgeny Zamyatin used SF to critique the government of the day (Margaret Atwood, *In Other Worlds: SF and the Human Imagination* (London: Virago, 2012), p. 63.

⁷⁴² Ibid., p. 5.

⁷⁴³ Freedman, *Critical Theory*, p. 70.

⁷⁴⁴ Richard Jacquemond, tr. David Tresilian, *Conscience of the Nation; Writers, State and Society in Modern Egypt* (Cairo: American University Press, 2008), p. 35; Jacquemond figures Naguib Mahfouz's *Children of Gebelawi* as the first modern Arabic allegory (p. 53).

⁷⁴⁵ Dorota Rudnicka-Kassem, "Egyptian Drama and Social Change: A Study of Thematic and Artistic Development in Yūsuf Idrīs's Plays" (PhD thesis, McGill University, Montreal, 1992. http://digitool.library.mcgill.ca/R/?func=dbin-jump-full&object_id=39369&local_base=GEN01-MCG02. Accessed 29.2.16; also published by Jagiellonian University Printing House (Cracow: Montreal-Cracow), 1993, p. 38.

Omran supports the idea of the causal connection between SF and real events discussed in Chapter 4.1, finding a link between the publication of Tolstoy's SF romance *Aelita* (1923), itself inspired by Wells' *The Time Machine* (1895), suggesting that its fictional Martian revolutionaries inspired the 1917 October revolution.⁷⁴⁶ The subject of censorship actually arises in one of the Arabic SF texts; in Mūsa's *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), the hero's wife Layla finds inspiration for installing a balcony in her home from "a forbidden book about Romeo and Juliet that she remembered from her youth".⁷⁴⁷

5.3 Locus

The tradition of literary pastoral Utopianism, idealising a bucolic life often by contrasting it with a corrupt urban locus, has ancient roots in classical literature. SF takes a less rigid approach to this popular binary; although More's *Utopia* denounced cities; in SF, William Gibson's seminal cyberpunk novel *Neuromancer* (1984) revels in metropolitan sprawl, while Stanislaw Lem regards modern agriculture as as artificial as cities,⁷⁴⁸ and for Amis, the nostalgic response of the bucolic idyll was simply one manifestation of the fear of new technology,⁷⁴⁹ cognate with the same underlying reactionary response that underpinned the Soviet *kholkhoz* and Mao's Great Leap Forward. The popular illustrative imagery associated with SF suggests that the genre would favour the City, the modern, urban, technologically-advanced environment of *Neuromancer* or *Do Androids Dream of Electric Sheep?*

In the Arab literature of the early twentieth century, writers responded to the encounter with modernity by raising the profile of the *fellah* (peasants), with Al-Hakim's *Awdat al-Rūḥ* (Return of the Spirit) and *Yawmīāt Na'ib Al-Aryāf* (Diary of a Country Prosecutor).⁷⁵⁰ Ghānim notes that Ṣabrī Mūsa's *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) is overrun by robots, but has an agrarian setting, as human beings in chain-gangs are still

⁷⁴⁶ Omran, *Fī al-'Ilm wa al-Khayāl al-'Ilmī*, p. 107. In this novel, Omran tells us (pp. 105 - 106) that adventurers find life on Mars, including a ruling cadre of scientists, with laws similar to those found in countries suffering under capitalism. They foment revolution, succeed and return to earth to find they have only been away for one day.

⁷⁴⁷ Ṣabrī Mūsa, *Al-Sayyid min Ḥuql al-Sabānikh* (Cairo: Al-Hay'a al-Miṣriyya al-'Āmma lil-Kitāb, 1987 first published 1982), p. 120.

⁷⁴⁸ Jameson, *Archaeologies*, p. 161; see also p. 181 for a diagrammatic illustration of the city versus country binary.

⁷⁴⁹ Kingsley Amis, *New Maps of Hell: A Survey of Science Fiction* (London: The Science Fiction Book Club by arrangement with Victor Gollancz Ltd, 1962), p. 73.

⁷⁵⁰ See Starkey, *Modern Arabic Literature*, on the origins of this 'fellah' literature: p. 101; pp. 115 - 116; pp. 126 - 127; also Moosa, *Origins*, pp. 253 - 266 for an account of 'fellah' literature.

required to labour in the fields. For her, this reflects a theme in Arab literature of progress versus backwardness.⁷⁵¹

Homo, the hero of *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field), whose name signifies his status as an everyman, lives in an unspecified country without specifically Arab identifiers, other than the names of his wife (Layla) and co-workers (David, Maḥmūd), in a highly controlled future society contained under glass domes following a devastating ‘electronic war’ that destroyed the outside world.⁷⁵² He works in a chain-gang in a field inside a vast domed agricultural facility, harvesting spinach which is exported by rocket to the inhabited areas in the south-west. The workers live communally in tower blocks, but life is “boring” and “depressing” (“تلك الحياة مملة... وكأبة”),⁷⁵³ and Homo decides on a whim to escape the massed ranks of workers for a few hours, a decision that changes his life and, via the televised screenings of his interrogation, the lives of the other subjects of the regime.

The countryside is a place of mechanised production serving a surplus society where hunger is unknown, but the outside world, devastated by fire tornadoes and carnivorous trees,⁷⁵⁴ is the focus of the rebellious dreams of Homo and the rebel leader Barūf, who dream of making a living in the wild natural world. The countryside is presented only as the locus of collectivist agricultural activity, and the devastated outside world as primitivist rather than bucolic. On two occasions, Homo has a vision of the outside world as jungular and anarchic, once when he is describing his moment of rebellion to David:-

The real sky could not be seen, but in my memory there suddenly gleamed an image of the age that was hundreds of millions of years ago...where mammals glided through the huge trees and lived in their branches... A picture blazing with light, all in different colours, that poured out over the tree tops in those huge chaotic forests in ancient times, revealing themselves to the eyes of our ancient ancestors, crouching in the tranquillity of those branches in a welcoming world of flowers and buds, insects and birds’ eggs, and the birds themselves...even in

⁷⁵¹ Mūsa, *Al-Sayyid*, p. 130.

⁷⁵² The same scenario is found in Al- Hakim’s *Fi Al- Sinna Malayūn* (In the Year One Million). ‘Azzām, *Al-Khayāl al- ‘Ilmī*, p. 121.

⁷⁵³ Ibid., p. 11.

⁷⁵⁴ Ibid., p. 213; also, the flower meadows eat people (p. 222).

winter there were still colourful flowers and at the same time, appetizing food...⁷⁵⁵

و حين عجزت عن رؤية السماء الحقيقية لمعت فى ذاكرتى فجأة صورة عمرها مئات الملايين من السنسن... عندما أخذت الثدييات تتسلق الأشجار العملاقة و تعيش بين أغصانها... صورة الأضواء الوهاجة المتعددة الألوان التى تغمر أعالي الاشجار فى تلك الغابات الاستوائية العميقة القدم فى الزمن و هى تكتشف لعيون أسلافنا الأقدمين القابعين فى طمانينة على الأغصان عن عالم رحب من الأزهر و البراعم و الحشرات و بيض الطيور و الطيور بنفسها... باقة من شتى الألوان الزاهية هى فى نفس الوقت طعام شهى...

and once when he is sleeping on the floor of the Temple of the Electronic Minds:

Homo, tired and dreaming, found himself running naked and joyful among the trees by his wife Layla's side, and behind them their children ran naked, their small, beautiful bodies bare. They peeled fruit that they gathered from trees, and Homo saw a beautiful blue lake lying with mountains rising behind it, covered in trees and bushes with their arms opened to embrace the world...⁷⁵⁶

و رأى هومو المتعب حلما وجد نفسه فيه يجرى عاريا بين الأشجار بمرح الى جوار زوجته السيدة ليلي. و خلفهما يجرى أطفالهما عراة بأجسامهم الصغيرة الجميلة العارية... و هم ينقادفون ثمار الفاكهة التى جمعوها من الأشجار... و رأى هومو فيما يرى النائم بحيرة زرقاء جميلة يرتفع خلفها جبل حافل بأشجار الصبار ذات الذراعت المفتوحتين لاحتضان العام...

Homo states that this first vision was inspired by a picture book from the old world (so it is not suggested that the image arose spontaneously from a Jungian collective consciousness), but he and David speculate that it is still hidden in men's minds (which does suggest this), and that the light shining between branches was what caused apes' brains to evolve. Both visions, and the primitive-brain or dream setting in which they occur, recall the vision of Mahmoud's hero Dāūd in *Al- 'Ankabūt* (The Spider), when he takes the final, fatal dose of the elixir.

The reality that Homo sees during his voluntary exile to the outside world is as lush and fecund as his dream, but inhospitable: "huge fruits among the earth's vegetation, fruit and

⁷⁵⁵ Ibid., p. 110.

⁷⁵⁶ Ibid., p. 191.

flowers, in gaudy colours, hot and steaming, as if they were going to explode with that life that was crawling over them”.⁷⁵⁷

ذات ثمار عملاقة من نبات الأرض و الفواكه و الزهور، محملة بألوان صارخة حارة و ساخنة و كأنها تتفجر
بالحياة التى تدب فيها

He saw beautiful flowers and their roots eating butterflies...he saw beasts pursuing each other, hunting down their food with their claws and fangs; in short, Homo saw life, gushing out violently, roaring and bloody, in a fierce struggle to remain alive.⁷⁵⁸

و رأى زهورا جميلة و جذابة تأكل الفراشات... وحوشا تطارد بعضها البعض لتنتزع غذائها بالمخلب وو
الانياب...بالاختصار...رأى هومو الحياة و هى تندفق عنيفة و صاخبة و دموية فى صراع متوحش من
أجل البقاء و الاستمرار...

The savage outside world is painted as dangerous, but exotic and enticing in its primitivism, by contrast with the grey and regimented totalitarian society with its lacklustre, controlled pleasures. Yūsuf al-Quwīrī's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) finds the narrator in an Arab country in the distant future also pondering the nature of the forest, but nature in 26th century Libya is controlled and populated, with the jungle acting as a garden and a safe place for human habitation.⁷⁵⁹

Although Homo's world is a surplus society where there is no hunger, where hot and cold food and drinks are delivered universally through separate tubes in the walls, Homo longs for the feeling of hunger and of achievement in obtaining his own food. He longs to see a real chicken or sheep,⁷⁶⁰ or to see a real tree instead of an artificial one (a wistful desire shared by Rick Deckard, the hero of Philip K. Dick's *Do Androids Dream of Electric Sheep?* (1968), who longs to own one of the expensive and rare organic sheep that is not an electronic simulacrum).⁷⁶¹

⁷⁵⁷ Ibid., pp. 219 - 220.

⁷⁵⁸ Ibid., p. 221.

⁷⁵⁹ Yūsuf al-Quwīrī, *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), Benghazi: Dār Al-Rūwād), 1997, pp. 95 - 97.

⁷⁶⁰ Ibid., p. 26.

⁷⁶¹ Ibid., p. 81.

The overarching theme of *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) is the ultimate futility of the wish to return to nature from the artificial world to the ruined wasteland of the outside world. Barūf's speech in the Hanging Hall is a plea for a return to nature, but the audience votes against him, preferring the drugged and regulated surveillance society offered by the regime to the reality of battling carnivorous fields, trees and beasts in the outside world.

Barūf calls for them to "treat the planet as our mother, as our ancient ancestors did".⁷⁶² The 'return to nature' language is repeated for emphasis: he demands "a return to using our natural human strength...and natural human relations...natural marriage...and natural childbirth...to achieve a natural humanity..."

بالعودة الى استخدام القوى البشرية الطبيعية...و العلاقات البشرية الطبيعية...و الزواج الطبيعي, و الولادة الطبيعية...كى
نتج يشرا طبيعيين...

He wants the Earth to be "a true paradise, an Eden" ("جنة عدن الحقيقية"),⁷⁶³ using the language of the original, prelapsarian Semitic Utopia. In Homo's world, the jungle is nature uncontrolled, a foil to the artificial, farmed world under the glass domes. At the end, when Homo wants to return to the artificial world, he articulates the difference between himself and Barūf, who wishes to remain in the outside world, by making a distinction between himself as a "simple peasant from the spinach field" ("فلاح بسيط من حقل السبانخ"), and Barūf as a "technocrat scientist" ("تكنوقراطى عالم"). Homo argues that their return to nature has been a mistake because the ancient people only lived in it because they had no other option for a safe place to live.⁷⁶⁴ The message appears to be that ordinary people, with their limited abilities, cannot afford to take the risk of adventuring into the unknown, and infers that the majority will always choose a safe place where they are controlled by others, rather than risking danger by creating their own Utopia.

The nature theme is secondary to the novel's examination of what it means to live in a totalitarian society, but the conclusion is that this dystopian society is at least a liveable environment, and that human agency (the destruction of the electronic war) was responsible

⁷⁶² Ibid., p. 173: "نعالج كوكبنا اللأم أصابه من شرونا البشرية القديمة"

⁷⁶³ Ibid., p. 174.

⁷⁶⁴ Ibid., pp. 175 – 6.

for making the natural world and the natural options for reproduction and food production impossible.

In *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field), environmental scientific advances are misused in the service of “racialism and tribalism, those diseases that remained hidden in the minds of the old men”:⁷⁶⁵

لقد كانت العنصرية و التعصبو هما المرض, الذى كامنا فى العقل البشرى القديم

The men of the past used artificial rain not only to cultivate deserts and fight against famine, but to drown the farms of their enemies, and destroy their roads and bridges.⁷⁶⁶ The electronic war devastated the outside world, and in addition there was industrial pollution causing the death of the forests, which gave rise to an atmosphere poisoned by clouds of carbon and sulphur.⁷⁶⁷ The environment inside the glass domes is tightly controlled; the weather is controlled, and people are buried in space.⁷⁶⁸

The ruling regime controls the reproduction of lower classes, and defend this strategy as a measure necessary to reduce poverty. During the debate in the Hanging Hall, the regime chief blames the ancient men for allowing “breeding without restraint” (“تتناسل دون ضوابط”), and this is also blamed for the over-use of fossil fuels that cause global warming and the melting of the polar ice caps.⁷⁶⁹ In Ahmed Khaled Towfik’s *Ūtūbiyā* (Utopia), Gaber tells the Utopian that reproduction is the poor’s only luxury, and that the population of the Others continues to grow despite malnourishment, castration crews and the introduction of a male contraceptive, ‘gossypol’.⁷⁷⁰ In *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), the 26th century world has begun to depend upon the sea as a food source due to population increase.⁷⁷¹ Al-Sharuni tells us that Yusuf Ezzedine Issa’s work examined the

⁷⁶⁵ Ibid., p. 148.

⁷⁶⁶ Ibid.

⁷⁶⁷ Ibid., pp. 74 - 75.

⁷⁶⁸ Ibid. pp. 14 - 16.

⁷⁶⁹ Ibid., p. 179.

⁷⁷⁰ Ahmed Khaled Towfik, *Ūtūbiyā* (Utopia), tr. Chip Rossetti. Doha: Bloomsbury Qatar Foundation Publishing, 2011, p. 107; Ahmed Khaled Towfik, *Ūtūbiyā* (Utopia), tr. Chip Rossetti (Doha: Bloomsbury Qatar Foundation Publishing, 2011), p. 91. Gaber also reference the theories of Malthus, the Egyptian social scientist Gamal Hamdan, Orwell and Wells with regard to the degeneration of the underclass, p. 78; English version, p. 63.

⁷⁷¹ Al-Quwīrī, *Min mufakkirah*, pp. 75 - 76.

subject of overpopulation; also, the short story *Fulk Nūḥ Al-Jadīd* (The New Noah's Ark), where a man from the future warns Egyptian children not to have more than one child.⁷⁷²

In Mahmoud's *Rajul taḥt al-Ṣifr* (Man Below Zero), the environment has been repaired after a devastating nuclear war between the great powers, although the new world came about as a consequence of a nuclear war; the use of atomic weapons causing a breach in the ionosphere that exposed the planet to radiation and electrical firestorms.

Atomic power turned into a blessed bomb, scattering blessings everywhere. It turned salt water into fresh water, and irrigated the desert and preserved food without freezing, and offered the human race a way of superfast communications very cheaply, and to each citizen simple fuel cleaner than petrol, and a thousand times stronger. This new energy could be used to control cities' climates, bring rainfall on the countryside, and cause humidity or aridity at will, as well as cultivate new varieties of fruits and vegetables.⁷⁷³

حولت الطاقة الذرية إلى قنبلة خيرة تنشر النعمة في كل مكان. تقلب مياه المالحة إلى مياه عذبة، وتروى الصحارى وتحفظ الغذاء بدون تثليج، وتمد الإنسان بسبيل مواصلات هائلة السرعة و رخيصة التكاليف، وتقدم للمواطن وقوداً سهلاً أنظف من البترول وأقوى منه آلاف المرات.

أمكن باستخدام هذه الطاقة الجديدة تكييف جو المدن. وإنزال المطر في الريف... وإحداث الرطوبة والجفاف على حسب الطلب... واستنباط فواكه جديدة و خضراوات جديدة.

Shāhīn adds that, by 2025, there were underground tunnels everywhere, powered by gravity, and trips to Mars, as well as a Great Freeze in 2048 during which scientists learned how to transport large amounts of food and oxygen as a precursor to space travel.⁷⁷⁴ The lecture presents the brave new post-war world as positive and progressive, ready for the author to introduce the elements of doubt that lead to the denouement that questions the value of such progress.

⁷⁷² Yusuf Al-Sharuni, *Al-Khayāl al-'Ilmi fī Al-Adab Al-'Arabī Al-Mu'āsir* (Cairo: General Egyptian Book Organisation 2000), pp. 100 – 101 (“لن يسمح لكما في الكوكب الحديد بأكثر من طفل واحد”).

⁷⁷³ Moustafa Mahmoud, *Rajul taḥt al-Ṣifr* (Man Below Zero) Cairo: Dār Akhbār Al-Yawm, 2008), pp. 16 - 17.

⁷⁷⁴ Ibid., pp. 17 – 18.

In *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), the scientists of 26th century Libya are still trying to release energy from any object using nuclear fission, but the dream of abundant energy is still a dream:

The eternal aim of science is to change the whole atom into energy and achieve the ‘principle of exchange... Changing matter into energy is an amazing thing, beyond imagining, because it offers mankind the source of gigantic inexhaustible power. In this way, we could provide enough fuel for a huge factory that would not cost more than the price of a single packet of cigarettes. Then we could produce an abundance of whatever we need, to a mythical degree, so that “all people could make toilets out of gold”, and we would live like kings because of such abundance of energy.⁷⁷⁵

أما الهدف الأبعد للعلم فهو تحويل الذرة بكاملها إلى طاقة وتحقيق "مبدأ التعادل"... فتحويل المادة إلى طاقة شيء عظيم يفوق الخيال لأنه يمد البشرية بمصدر قوة جبارة لا تنضب. و سترتب على ذلك أن الوقود اللازم لإدارة مصنع كبير لن يكلف أكثر من ثمن علبة سجائر واحدة! و عندئذ يمكن للإنتاج أن يفيض عن الحاجة لدرجة أسطورية، و "يمكن للناس جميعاً أن يصنعوا مراحيضهم من الذهب" بعدها أصبحوا مالكيين لمناجم أغزر طاقة طبيعية

This is language of longing, of future nostalgia for a Cockaigne of abundance, not yet achieved. Yet in the narrator’s world, there are no birds or palm trees (the birds were killed to protect harvests, while the palm trees were cross-bred out of existence),⁷⁷⁶ petrol is a relic that can only be found in a museum, and people pay to see or ride a camel, now a rarity.⁷⁷⁷

In Ahmed Khaled Towfik’s *Ūtūbiyā* (Utopia), the removal of the importance of oil from the world economy has radically shaped the Arab world; an American chemist invents a fuel substitute, *biroil*, in 2010 and thereafter the West immediately bought the only other things of value that Egypt had to sell, their antiquities, paid for by *biroil*.⁷⁷⁸ (The novel concludes with the triumph of the dispossessed, who fill a *biroil* lorry going to the Utopia colony with excrement, making it impossible for them to leave).

⁷⁷⁵ Al-Quwārī, *Min mufakkirah*, p. 67.

⁷⁷⁶ Ibid., p. 42.

⁷⁷⁷ Ibid., p. 67.

⁷⁷⁸ Towfik, *Ūtūbiyā* (Utopia), pp. 28 – 29; English version, pp. 21 – 22.

Environmental matters are not discussed in the *Milaff*, except for a humorous touch in No. 34 *Waḥsh Al-Muḥīt* (Sea Monster), when the monster is sighted and the Egyptian navy deploys a laser gun “in spite of nature conservation laws”.⁷⁷⁹ In No. 3, *Madinat al-A'māq* (City of the Deep) the team investigate the modern-day alchemy of extracting gold from sea-water, while a perpetual energy plant is the scientific ‘maguffin’ in No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future). There is no deep environmental concern underpinning the *Milaff*; the team’s home life is rarely glimpsed, and their work base after the Occupation period is in the Moqattam hills of Cairo. Most of the action takes place in remote locations in Egypt, or in space, and the question of the preferability of one locus over another is limited to a nationalistic preference for Egypt over all other countries.

5.3.1 Alternative Loci

Literary use of the moon as a Utopian locus can be traced back to Lucian’s second century *Vera Historia*, often cited as a precursor of Arab SF,⁷⁸⁰ and was continued in the European Utopias and fantastic seventeenth-century voyages of Kepler, Wilkins and Godwin, and the nineteenth-century moon-voyages of Verne and Wells.⁷⁸¹ The moon was a familiar yet other world upon which a fantasy of an ideal society could be projected. Fantasies of a pristine lunar world were also projected as a futuristic alternative to the ever-shrinking earthly *terra incognita*,⁷⁸² although the agenda behind the real lunar project was militaristic, in contrast to the fanciful and romantic nature of its cultural portrayal.⁷⁸³

For Al-Sharuni, al-Ḥakīm’s *Fi-Sinnat Malayūn* (The Year One Million) (1958), *Al-Ikhtirā'a Al-Ajīb* (The Amazing Device) (1958) and his plays *Riḥlat illa al-Ghad* (Journey to Tomorrow) (1957), *Taqrīr Qamry* [sic] (Moon Report) (1972) and *Shā'ir 'ala Al-Qamr* (Poet on the Moon) (1972) were a response to the first rocket launch in October 1957, as al-Ḥakīm

⁷⁷⁹ Farouk, No. 34 *Waḥsh Al-Muḥīt* (Sea Monster), p. 11.

⁷⁸⁰ Mahā Maḥlūm Khadr in her 2002 thesis “Bina’ Ruwāyat al-Khayāl al-‘Ilmī fī al-Adab al-Miṣrī al Mu’aṣir” (PhD Dissertation, Cairo University, 1999), p. 32; also Khammas, “The Almost Complete Lack”.

⁷⁸¹ For an account of proto-SF works, see Brian Stableford, Chapter 1 “Science fiction before the genre” in James and Mendlesohn, *Cambridge Companion*, pp. 15 – 31.

⁷⁸² Stableford observes that early literary works bracketed as proto-SF are generally contemporary speculations on terra incognita. *Ibid.*, p. 15.

⁷⁸³ Susan Schneider notes that while the moon landings were cast by the media as romantic, patriotic and humanist, the nationalist agendas behind them were in fact closely connected to the development of defence technology. Susan Schneider, *Science Fiction and Philosophy: From Time Travel to Superintelligence* (Chichester: Wiley-Blackwell, 2009), p. 231.

engaged with the idea of space travel,⁷⁸⁴ while William Maynard Hutchins finds *Taqrīr Al-Qamr* (which he dates to 1970) and *Shā'ir 'ala Al-Qamr* (Poet on the Moon) (which he dates to 1971, following Dawwara), to be al-Hakim's literary response to Gagarin's space voyage of 1961, and the moon landings of 1969.⁷⁸⁵

The moon does not feature prominently in Farouk's *Milaff*; it appears mainly as an internationally-run panopticon prison for violent criminals in No. 48 *Sijn Al-Qamr* (Moon Prison). It is terraformed, with huge glass-covered farms, and guarded by teams of soldiers and space police that change every month. The team believe the moon to have no indigenous life, but find that there is a city inside the moon called Luna, inhabited by winged beings, and built of rose-coloured marble. The ruler tells them the history of Luna, which was once was a proper planet and not just a satellite of Earth. It had gravity, atmosphere, heat, vegetation, mountains, clouds and a sky, but was made desolate by civil war. They visited Earth several times, and the team come to realise that Luna's winged beings are what are known on Earth as angels.⁷⁸⁶

The Moon Prison re-appears in in No. 81 *Ramz Al-Qūwwa* (Symbol of Strength), when the criminals escape and return to earth; later its weapons arsenal is seized in No. 86 *Al-Imbirātūr* (The Emperor) by an American villain who wants to rule the world, and it continues to be maintained as a base in No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force) and No. 96 *Budhūr Al-Sharr* (Seeds of Evil).

Moon travel is a reality in al-Quwīrī's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), but is mentioned only fleetingly. The moon remains a cold, dead environment, although the topic of moon travel is popular, with offices in all the world's capital cities selling tickets to the moon.⁷⁸⁷ A terraformed, vegetable-growing moon features as a space station in *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field),⁷⁸⁸ but only as an agricultural satellite. Being uninhabited in the texts considered here, it presents no discourse on colonialism, only a mild exoticism, and functions chiefly as an emblem of indigenous Arab space travel capability.

⁷⁸⁴ Al-Sharuni, *Al-Khayāl al-'Ilmi fī Al-Adab*, pp. 101 – 102.

⁷⁸⁵ William Maynard Hutchins, *Tawfiq al-Hakim: A Reader's Guide* (London: Lynne Rienner, 2003), p. 84. For a short account of these plays, see 'Azzām, *Al-Khayāl al-'Ilmi*, pp. 69 – 70.

⁷⁸⁶ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison) (page number not available; copy mislaid).

⁷⁸⁷ Al-Quwīrī, *Min mufakkirah*, p. 87.

⁷⁸⁸ Mūsa, *Al-Sayyid*, p. 96.

Jules Verne's *20,000 Leagues Under the Sea* (1870) was the seminal modern proto-SF text projecting the possibility of man living under the sea; Jacques Cousteau's popular films of the 1950s and onwards later popularised this concept in the public imagination. The underwater locus, like the moon, began as a fantastical imaginative *terra incognita*. Underwater Utopias feature only rarely in the texts examined here, although for Al-Sharuni, Nihad Sherif's *Sukkān al-‘ālam ath-thānī* (Inhabitants of the Second World), an SF romance set underwater, was predicated upon the world's need to exploit the inexhaustible resources of the sea.⁷⁸⁹

Farouk produces a glass-domed underwater city early in the *Milaff*, No. 3 *Madinat al-A'māq* (City of the Deep), founded to research the animal and mineral wealth of the ocean in the Mediterranean off Alexandria, and in No. 92 *Al-Rihlat Al-Rahība* (The Terrible Voyage), Nūr's visit to Atlantis (in the ocean off Aghadir in Morocco) is facilitated by a magical-fantastical journey inside a bubble provided by the Atlantean robot S-18. Journeys to the centre of the earth, another popular SF trope in the *terra incognita* mode, are infrequent; in No. 90 *Ru'b Al-'Amāq* (Terror in the Deep) a race of aliens living under a volcano, armed with planes and planning world domination, are foiled by the team and frozen for eternity.

If journeys to loci such as the moon, the bottom of the ocean and the centre of the earth are essentially exotic and impractical intentional 'otherings' of places that offer plausible alterity, the 'island' is less of a 'novum', and more of a power fantasy, an idea of purity, of a mini-world that does not necessarily require advanced technology to visit or live in, providing opportunity to the writer to examine its society as a microcosm or allegory of the real world. Its 'separated' status offers time and space apart from the rest of humanity, and the chance to order life differently. In Ibn Tufayl's twelfth-century *Ḥayy Ibn Yaqzān* (roughly translated as Life, Son of Awakening), the narrator explores how a boy growing up alone on a desert island can become aware, without human intervention, of the existence of God; the intention is for the reader to realise the universality of human experience and intuition of the divine, in the absence of proselytization or indoctrination.⁷⁹⁰

⁷⁸⁹ Al-Sharuni, *Al-Khayāl al-'Ilmi*, pp. 43 – 44.

⁷⁹⁰ Ibn Tufayl, *Ḥayy Ibn Yaqzān*, tr. Lenn Evan Goodman (New York: Twayne Publishers, 1972); Introduction, pp. 7 – 22.

The hero of Al-Baqqāli's *At-Tūfān Al-Azraq* (The Blue Flood), Dr 'Aly Nādir, calls for a 'Shangri-La', a secessionist pocket-Utopia on earth where scientists can solve mankind's problems, early in the narrative before he is forcibly confronted with the isolated science-enclave of Jebel Judi in the Moroccan desert:

Is there a Shangri-La to protect our heritage?... a community of researchers and scientists to build a castle or an island...and preserve the gifts of science and art and industry and culture to create a clean new world.⁷⁹¹

هل هناك "شانجريلا" لحفظ هذا التراث؟... جماعة من العلماء المسؤولين ببناء قلعة أو جزيرة... يجب الاحتفاظ بالموهوبين من العلماء و الفنانين و الصناع و المحترفين لبدء عالم جديد نظيف.

The 'blue flood' of the title is a flood of atomic rays with which some of the Jebel Judi scientists think the current civilisation should be destroyed, in order to rebuild (the other options are "Wait and See" ("الإبقاء و الانتظار") and "Conquest and Renewal" ("الاستيلاء و الإصلاح").⁷⁹² While Jebel Judi is a secret underground city concealed from aerial reconnaissance by an artificial lake, rather than a physical island, the concept is the same; isolation, the construction of an (inevitably doomed) Shangri-La; its fate a caution against science becoming an elite activity, or at too great a distance from humanity to make morally defensible decisions.

5.4 Uchronias, or Allohistories: Archaism and Futurism

SF Utopias can transpose by time as well as place, creating alternative timelines for past events (uchronias, or allohistories), or projecting alternative futures. The necessary scientific element in alternative pasts may be deliberately fantastical, even appearing self-consciously anachronistic in the case of steampunk romances, Victoriana-inflected counter-factual scenarios that meld real historical periods with anachronistic technological devices. In the history of the Western genre, Scholes finds a definite point in time when Utopias became located historically in the future and not 'outside time',⁷⁹³ Spufford notes that the starting point for many American allohistories is a war, followed by rapid technological

⁷⁹¹ Aḥmed Abd Al-Salām Al-Baqqāli, *At-Tūfān Al-Azraq* (The Blue Flood) (USA (sic): Hasan Yahya Publishers, 2012), p. 35.

⁷⁹² Ibid., pp. 92 – 93.

⁷⁹³ Robert Scholes, *Structural Fabulation* (Notre Dame, Indiana: University of Indiana Press, 1975), p. 15.

development.⁷⁹⁴ Allohistory is an obvious vehicle for a re-writing of history, for pre-colonial nostalgia, or simply wistfulness about what could have been, and therefore an ideal mode for authors writing in a milieu dominated by a history of being colonised.

Examples of allohistories in Western SF include Philip K. Dick's *The Man in The High Castle*, and Neal Stephenson's *The Diamond Age*, which both feature future worlds with a Far Eastern global hegemony, in the former following a German victory in the Second World War. Mendlesohn points also to the Western, Arab-inflected allohistories of Jon Courtenay Grimwood (*Pashazade*, 2001) and Frank Herbert (*Dune*, 1965),⁷⁹⁵ while Cook's examination of a short play published on Al-Qaeda's propagandist outlet jihad.net finds a jihadist envisioning of a future where America has been destroyed.⁷⁹⁶

Archaism and nostalgia for a once-great Arab or ancient, even mythical, Middle Eastern past are powerful recurring themes in the texts, as we have seen in the previous chapter in the examination of scientific discoveries specifically valorised as indigenous with an historical pedigree.⁷⁹⁷ Harking back to the imagined scientific achievements of Pharaonic or Atlantean times furnishes the narratives with a nationalist framework that sets the events in the context of an outworking of ancient indigenous wisdom.⁷⁹⁸ Maynard Hutchins notes the Pharaonic

⁷⁹⁴ Francis Spufford, "The Difference Engine and *The Difference Engine*", in Francis Spufford and Jenny Uglow (eds), *Cultural Babbage: Technology, Time and Invention* (London: Faber and Faber, 1996), p. 278.

⁷⁹⁵ See Andy Duncan, Chapter 15 "Alternate History" for an overview of Western allohistory; also Farah Mendlesohn on Islam in Western allohistory in Chapter 20 "Religion and Science Fiction" in James and Mendlesohn, *Cambridge Companion* p. 209 – 218; p. 268.

⁷⁹⁶ David Cook, *Contemporary Muslim Apocalyptic Literature* (New York: Syracuse University Press, 2008), p. 182.

⁷⁹⁷ The occultist or Fortean school of thought beloved of theosophists such as Edgar Cayce and Erich Van Daniken finds literary expression too in the west; 'Azzām finds American author Raymond Bernard making use of this trope in *The Hollow Earth* (1988), where alien civilisations colonised Atlantis and Lemuria, colonising Pharaonic Egypt when these continents sunk in ancient times. 'Azzām, *Al-Khayāl al-'Ilmī*, pp. 42 – 43.

⁷⁹⁸ Anis Mansour's work also explored Pharaonic and supernatural phenomena: 'Azzām, *Al-Khayāl al-'Ilmī*, p. 72. In the 1920s and 1930s, Egyptian literature saw a revival of interest in Pharaonism; Hutchins finds "spiritual pharaonism" in Al-Hakim's *'Awdat al-Rūh* (Return of the Spirit), although it was not set in ancient times: Hutchins, *Tawfiq al-Hakim*, p. 20.

See also 'Salama Moussa's blog post of 30 September 2014 on Naguib Mahfouz' pharaonism and its co-optation by Sayyid Qutb as a tool of Egyptian-Islamic nationalism:

<http://salamamoussa.com/2014/09/30/return-of-the-natives-pharaonism-redux/> (accessed 29.2.16). For a full treatment of modern Pharaonism, see Elliott Colla, *Conflicted Antiquities: Egyptology, Egyptomania, Egyptian Modernity* (Durham and London: Duke University Press, 2007); the perception of Pharaonic ruins as lessons, wonders ('*aja'ib*) and warnings, and the pyramids as emblems of entropy (pp. 80 – 81); Al-Tahtawi's role in encouraging national interest in the culture of ancient Egypt (pp. 121 – 126), and the roles of Naguib Mahfouz (pp. 234 – 245) and Sayyid Qutb (pp. 260 – 268) in fostering this interest as a source of national identity and pride.

echoes in Al-Hakim: ‘*Awdat al Rūh* has pharaonic references,⁷⁹⁹ but is not set in pharaonic times, like Mahfouz’s three Pharaonic novels,⁸⁰⁰ while Moosa’s account suggests an active valorisation of Pharaonic over Islamic culture on the part of Al-Hakim,⁸⁰¹ a pride that also struck a chord with the contemporaries of Mahfouz, who, Moosa suggests, also saw the parallels with the contemporary struggle in the 1930s to overthrow British rule.⁸⁰²

The Egyptian comic strip *Ramses* explored the experience of a simple Egyptian characters transported to Europe; Douglas and Malti-Douglas find that the narrative acted to reinforce the conservative values of police authority and the virtue of simple country life. The lesson is that Pharaonic culture is wonderful, but a relic.⁸⁰³

Farouk revisits ancient Egypt on a number of occasions, making use of the popular ‘ancient aliens’ trope;⁸⁰⁴ the alien-scientist in No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) says that he was responsible for advising Imhotep, the architect of the Great Pyramid,⁸⁰⁵ although in No. 54 ‘*Abr Al-’Uṣūr* (Across the Ages) it is actually Nūr who suggests its construction.⁸⁰⁶ In No. 92 *Al-Riḥlat Al-Rahība* (The Terrible Voyage), Nūr’s ‘info-dump’ on Atlantis begins with a reference to Plato’s *Critias*.⁸⁰⁷ The Atlanteans are preparing for war, hiding from the aliens of the planet Bir wa Zeit, and developing their ionoproton bomb⁸⁰⁸ (although it is destroyed in No. 93 *Nuqṭat Al-Ṣifr* (Zero Point) by a bomb planted by the British agent James Bradley).

In Mahmoud’s *Al-’Ankabūt* (The Spider), the villain Damiān tells the hero Dāūd that by using his elixir he has experienced thousands of his own past lives, but these are always located in the Semitic world; he has been an Amalakite, a Turk, one of the Fatimid Caliphs, and a court

⁷⁹⁹ Siddiq notes the revivifying effect of ‘*Awdat al-Rūh* (The Return of the Spirit) (1933) on Egyptian literature, and in particular its influence on the nationalism of Nasser (who missed the irony of a Western character providing this view). Mohammed Siddiq, *Arab Culture and the Novel: Genre, Identity and Agency in Egyptian fiction* (London and New York: Routledge, 2007), pp. 18 - 20.

⁸⁰⁰ Hutchins, *Tawfiq al-Hakim*, p. 20.

⁸⁰¹ Moosa, *Origins*, p. 308.

⁸⁰² Ibid., p. 349.

⁸⁰³ Allen Douglas and Fedwa Malti-Douglas, *Arab Comic Strips: Politics of an Emerging Mass Culture* (Bloomington, IN: Bloomington Press, 1994), pp. 19 - 20.

⁸⁰⁴ Farouk, No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), a murder mystery with Pharaonic plot twists, and No. 28 *Al-Nahr Al-Muqaddas* (The Sacred River), featuring ancient, scientifically-advanced Egyptians living in occultation in the Egyptian desert.

⁸⁰⁵ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), pp. 121 – 123.

⁸⁰⁶ Farouk, No. 54 ‘*Abr Al-’Uṣūr* (Across the Ages), p. 46.

⁸⁰⁷ Farouk, No. 92 *Al-Riḥlat Al-Rahība* (The Terrible Voyage), p. 67.

⁸⁰⁸ Ibid., p. 81.

jester in Aleppo, while Dāūd experiences past lives in Iraq, the Sinai, Al-Andalus, Acre and Qal’at- al-Ḥuṣn. In *Rajul taht al-Ṣifr* (Man Below Zero), we learn during Shāhīn’s expository lecture that the Iraqi researcher Fairouza has discovered the ruins of Atlantis under the Atlantic Ocean, finding that the Atlanteans had electricity, atomic power and tall buildings, practised religion and had temples similar to the pyramids.⁸⁰⁹ The pharaoh’s architect Imhotep appears in a dream to the hero Tawfīq in *Al-Khurūj min al-tābūt* (Rising from the Coffin), telling him that he is also the reincarnated and recently-deceased Brahma whom he knew in India. Tawfīq falls into a further trance, meeting ancient pharaonic kings and queens, and sees the Brahma, again in their priest, Nun Mahab, who reveals to him the location of the sarcophagus of Khufu.

In Ahmed Khaled Towfik’s *Ūtūbiyā* (Utopia) (2010), Egyptian society in the near future of 2020 is sharply polarised between a small elite living in luxury in the eponymous gated resort on the north coast, protected by American marines, and the masses of the abandoned underclass dwelling in slum conditions in the cities. Every pleasure is permitted to the Utopians, except for leaving; the nameless teenage anti-hero, bored by his sex and drug-filled pleasure-driven life, seeks the thrill of transgression by smuggling himself and his girlfriend into Cairo to bring back a trophy body-part from a human hunt. The coming revolution with which the narrative ends is foreshadowed by the educated narrator in the first chapter, when he describes the conditions of the ‘Others’ (“الأغيار”) by referencing the French and Iranian revolutions.⁸¹⁰ The narrative shifts between the unnamed anti-hero of Utopia, and his quarry, the naïve Other, Gaber.

The protagonists’ names are symbolic; Gaber is cognate with healing and mending (as well as with force), while his gentle sister Safiyya’s name is associated with purity. The Utopian anti-hero has no name;⁸¹¹ his girlfriend, like other Utopian citizens, has a French name, Germinal (perhaps tellingly, the seventh month in the French Republican calendar, cognate with growth and fertility, also a battle-cry for revolution in Emile Zola’s eponymous novel), while the names that the naïve Gaber gives as a cover when smuggling his Utopian guests back to

⁸⁰⁹ Mahmoud, *Rajul taht al-Ṣifr*, p. 21.

⁸¹⁰ Towfik, *Ūtūbiyā* (Utopia), p. 19; also p. 87 when the Utopians are first surrounded by the Others and compared to the mob which stormed the Bastille; English version, p. 13; p. 71.

⁸¹¹ Ibid., At the outset, he says “Who am I? Let’s not talk about names. What’s the value of name when you’re no different to anyone else?” (p. 12; English version, p. 6). Later he tells Gaber his name is Alaa, but this may not be his real name (p. 92; English version, 75).

Utopia, Hanifa and Nafisa, are cognate respectively with paganism and the concept of material and spiritual value.

Towfik's *Ūtūbiyā* (Utopia) shows us a post-oil world where the Egyptian elite have withdrawn to their enclave, and the Others who are left behind in abject poverty are blamed by both the hero Gaber and the nameless Utopian anti-hero. In the slums of Shubra in Cairo, Gaber expresses this belief:⁸¹²

Sometimes I feel that Egyptians are a people who deserve what happens to them. A submissive people, lacking resolve, who bend before the first whip that lashes the air...There was someone who gathered the good-for nothings, the sluggish, the bums, and those lacking ambition from the ends of the earth into one national homeland – Egypt.

أحياناً أشعر أن المصريين شعب يستحق ما يحدث له. شعب خنوع فاقده الهمة ينحني لأول سوط يفرقع في الهواء...ثمة شخص جمع اللأوغاد والخاملين و الأفاقين و فاقد الهمة من أرجاء الأرض في وطن قومي واحد هو مصر....

Towfik has declared that the novel is an amplification of a socio-economic polarisation that is already happening in Egypt, even that some readers have credited it with being one of the sparks that ignited Egypt's Arab Spring.⁸¹³ Gaber's critique of the Egyptian masses as supine may be shared by the author; although the attempted revolution and the backlash during the Arab Spring resulted in the deaths of many protestors, the mass social disobedience after which Gaber appears to hanker has not occurred, particularly after the re-imposition of Al-Sisi's military government.

⁸¹² Ibid., pp. 77 – 78; English version, p. 62.

⁸¹³ Towfik has said that he set *Ūtūbiyā* (Utopia) in Egypt in the very near future because space is too much of a luxury, too far away for concerns with poverty (Shubbak literary festival, Arabic Science Fiction, 15 July 2015, participating as a panellist by live weblink from Egypt). His Utopia is the ultimate class warfare – a human hunt – in the panel session, he said that this was not based at all on Anthony Burgess' *A Clockwork Orange* (1962), but a response to two factors. The first was Galal Amin's *Whatever Happened to the Egyptians* (2000), and the second, a jet-ski accident at Marsa Matrouh, where a student from a poor family was killed by a member of the elite, without a subsequent trial or compensation. He states that *Utopia* was written to capture the ennui and the cruelty of the elite, in the manner of Western dystopia such as the film *Running Man* (1987). Interview with Cheryl Morgan, at <https://worldsf.wordpress.com/tag/ahmed-khaled-towfik/>; accessed on 29.2.16.

Gaber laughs when the Utopian asks him why the Others have not revolted; the security apparatus is too complex to allow a revolution in the style of the twentieth century.⁸¹⁴ The strength of the Utopian's hatred of the Others and his real conviction in his belief that the Others deserved their misfortune is horribly reinforced when he rapes Safiya, telling her during the rape that her poverty is her fault, and drawing an interesting distinction between the private enterprise of his father, and the assumed public or governmental employment position of hers, and her people's apparent acquiescence in the new social reality,⁸¹⁵ making the rape part of and a metaphor for this brutalised narrative of the clash of conservative and leftist ideologies.

It is Gaber who provides the novel's contextualising exposition. He tells his guests that tourism could no longer feed Egyptians, that Israel opened an alternative canal that deprived Egypt of revenue from the Suez Canal, and the Western adoption of the alternative fuel *biroil* meant that the Gulf oil economies no longer needed their Egyptian guest-workers; the state consequently abolished all forms of welfare, police and government jobs, privatising everything and creating a huge underclass, while those already rich or socially connected used their resources to create the fortress of Utopia.⁸¹⁶

Education is not framed as a solution to the problem, nor is cultural commonality. Both the Utopian and Gaber are educated, and both are unusual among their peers for their love of books, but, as the Utopian observes, such education can only make the poor more aware of the injustice of their situation, and his reading does not lead him to feel sympathy for Gaber's misfortune.⁸¹⁷ Education is not all that they have in common; Gaber soliloquises that they both love violence and drugs, are both bored, and both fascinated by religion,⁸¹⁸ but it is Gaber's insistence on humanity as intrinsically merciful that leads to his death, although that death is revealed at the end to be an effective martyrdom, as it becomes the catalyst for the revolution. Gaber, who refuses to kill his monstrous Utopian guests, and who finds that he

⁸¹⁴ Towfik, *Ūtūbiyā* (Utopia), pp. 107 - 108; English version, p. 91.

⁸¹⁵ Ibid., pp. 150 - 151; English version, pp. 131 - 132. Also, as the mob approaches Utopia at the end of the novel, he still opines that the Others are in their position because they are stupid, lazy and weak (p. 174: English version, p. 154).

⁸¹⁶ Ibid., pp. 97 - 98; English version, pp. 81 - 82.

⁸¹⁷ Ibid., p. 99; English version, p. 83. Later, Safiya tells the Utopian that Gaber's education is no use; although a graduate, he did not have the connections necessary to obtain employment. As the novel is set in 2020, and published in 2010, this sets Gaber's experience within the contemporary period (p. 101; English version, p. 85).

⁸¹⁸ Ibid., p. 120; English version, p. 104.

cannot rape a drugged Germinal when left alone with her, is killed and his sister Safiya raped by the Utopian, but their sacrifices are required to finally inflame the mob to action.

The novel ends with the Others hijacking a *biroil* truck and replacing its contents with sewage, so that the Utopians' aircraft cannot take off. Marooned in their enclave, they watch as hordes of torch-bearing Others stream across the desert towards them. The Utopian learns that it was his actions that galvanised the Others, who are about to overrun them, although he does not repent, but prepares for the real-life battle he has longed for. The message is the hope that the mob will turn in the end, after one crucial catalytic event, and the elite will be annihilated or at least chastised.

The prologue to *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field) breaks the fourth wall to make the author's intention clear; he is creating an alternative future world with the specific aim of showing the reader a clear vision of where their present is leading:

We human beings are currently experiencing a situation rather like the men of the past in history, if they opened their eyes more than five thousand years ago onto a completely new world... this leads us to a study of the past, in order to throw light on the present, but now, we are turning this mirror of time upside down for you, delighting you with a clear picture of the future, that can also extend to the present, with many invaluable insights.⁸¹⁹

نحن البشر نمر الآن بوضع شبيهه بانسان ماقبل التاريخ, عندما فتح عيتيه منذ أكثر من خمسة آلاف سنة,
على دنيا جديدة تماما...و لقد تعودنا على دراسة الماضي, لتلقى الضوء على الحاضر...و لكننى الآن أقلب
لكم مرآة الزمن, مقتنعا بأن صورة واضحة للمستقبل, يمكن أيضا أن تمد حاضر كم بعيد من البصائر
التي لا غنى عنها..؟

The future is a bleak dystopia, a surveillance state of slave-labour with carefully-imposed social controls and outlets, including pacifying drugs, state brothels, state-organised marriages and factory-farmed children, with no alternative for the disaffected other than almost certain death in the dangerous outside world. This author's introduction is not unique

⁸¹⁹ Mūsa, *Al-Sayyid*, p. 7.

among the texts considered here; al-Quwīrī's prologue to *Min mufakkirah Rajul lam yūilad* (Diary of a Man Not Yet Born) states that:

...I did not wish simply to create a new Virtuous City or Utopia on paper, in the manner in which our human masters such as Plato in his Republic, or Thomas More in his gaudy fictional world, free from every vice and vulgarity, as we can see in today's vices and vulgarities.⁸²⁰

كما أنني لم أهدف قط لخلق "مدينة فاضلة" جديدة أو "يوتوبيا" على الورق، على غرار ما صنع معلمو البشرية أمثال أفلاطون في "الجمهورية" و "توماس مور" في عالمه القصي، المزوق، الخالي من كل رذيلة أو شائبة كما نتصور اليوم الرذائل و الشوائب.

Mahmoud's *Rajul taht al-Ṣifr* (Man Below Zero) is set in the near future, in 2067; there is a one-world socialist government as a result of a devastating third world war and subsequent plague that forced all nations to work together to find a cure. The breakdown of national boundaries has been so successful that international intermarriage has made the human race almost homogenous, clone-like in appearance.⁸²¹ It is a post-oil society; the novel opens with the two male protagonists reminiscing on a rocket-plane about the former "liquid gold" ("الذهب السائل") of those days.⁸²² A history lesson follows in the form of a lecture by Dr Shāhīn, tracing the origins of the new society in the Third World War between Russia and America that began on 8 August 1999 (the novel was first published in 1961), in which China intervened as a peacemaker.⁸²³

For Farouk, the future is triumphantly Egyptian-led, though beset at all times by dangers from delinquent fellow-Egyptians, aggressive enemy nations and aliens. The *Milaff* are set in a futuristic, scientifically pre-eminent Egypt and is Farouk's vehicle for his vision of Egypt as a world leader. Farouk also uses allohistory to show alternative world-views.

In No. 42 *Al-Arḍ Al-Thāniya* (The Other World) the team are on holiday in the Bermuda triangle when they are transported to a parallel universe, an alternative world in the year 2009, where the Germans won World War II after Admiral Karl Donitz dropped atomic

⁸²⁰ Al-Quwīrī, *Min mufakkirah*, pp. 7 – 8.

⁸²¹ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero), p. 44.

⁸²² Ibid., p. 6.

⁸²³ Ibid., p. 9.

bombs on Washington and Moscow. Puerto Rico is not an American territory, but a German possession. Nūr takes the opportunity given by the history lesson to remind Maḥmūd that the Allied victory allowed the British Foreign Minister Balfour to make his promise and that, had a German victory taken place, the Jews would not have been given a homeland.⁸²⁴ In a politically-charged statement, he suggests that this might have been a better outcome.

Nazis also feature in No. 55 *Asrā Al-Zaman* (Prisoners of Time), where they are figured as villains, with the evil time-travelling scientist Riḍwān taking on the identity of a senior figure in the Nazi party (curiously, he takes the name of Karl Mannheim, a real Hungarian Jewish professor of the sociology of knowledge who fled the Nazi regime). The team join the Resistance, while Riḍwān/Mannheim tries to persuade Hitler to invade Russia before winter, prevent the Normandy landings and invent the atomic bomb before the Allies. The team build a super-plane in one night and defeat Riḍwān/Mannheim, re-setting the time-line, and upon their return find a history book with a picture of Ridwan/Mannheim, showing that he was executed after the Nuremberg trials.

5.5 Internationalism

The spirit of international co-operation burns brightly in the texts, often in a positive, voluntary context, where one-world government is figured as benign. The futuristic world of the year 2067 in *Rajul taḥt al-Ṣifr* (Man Below Zero) is determinedly international. The opening scene with the two physically similar protagonists stresses that their similarity is now universal; throughout the novel the author is anxious to point out the many different nationalities of the scientists who created its brave new world. Among the mixture of nationalities who now look alike, he lists English, French, American, Russian, Chinese, Japanese, Indian, Indonesian, Singhalese and Eskimo.⁸²⁵

During Dr Shāhīn's lecture, he credits a number of international scientists with discoveries and inventions during and after the immediate post-war effort to rebuild civilisation. The author credits a Dutch astronomer, Zollinger, with the discovery that the earth was almost knocked out of its orbit by the atomic war,⁸²⁶ the Indian biologist Rajamanan who researches

⁸²⁴ Farouk, No. 42 *Al-Ard Al-Thāniya* (The Other World), p. 38.

⁸²⁵ Mahmoud, *Rajul taḥt al-Ṣifr* (Man Below Zero), p. 5.

⁸²⁶ Ibid., p. 11.

the plague virus,⁸²⁷ the Chinese Hsiang Wa who incubates it in a snake's egg,⁸²⁸ the Indonesian physicist Timawa who splits the neutron, the Turkish scientist 'Asmat Agha who invents a rocket that can pierce and alter Venus' atmosphere, the Egyptian chemist Badran's invention of the pleasure-drug Sa'ādūl, the Iraqi Fairouza who discovered the remains of Atlantis,⁸²⁹ the Hungarian Agina who grows babies in jars, the Egyptian Dr Ghānim, who genetically engineered them,⁸³⁰ and the Australian Legg who made living things out a colloidal solution from a chain reaction of amino acids.⁸³¹ The largest electromagnetic laboratory in the world is in Bolivia.⁸³²

Mahmoud illustrates the indiscriminatory nature of the plague that followed the Third World War by having Shāhīn say that it affected everyone “from the Sorbonne student to the most primitive negro” (“من طالب السوربون إلى الزنجرى البدائى”),⁸³³ an expression that falls as an uneasy dissonance upon the modern ear. The author is clearly at pains specifically to include as many nationalities as possible in the effort to re-establish civilisation, and even stimulate inter-planetary research, following the War. While the protagonist Shāhīn is Egyptian, and the villain 'Abd Al-Karīm Iraqī, the novel is filled with references to scientific heroes of other nations, and although the post-War world is imperfect, with its disturbing forcible injections of the calming drug Sa'ādūl, and the continued human problems of violence and discontent even after major environmental and medical problems have been overcome using science, it is at least fully internationalised and co-operativist, unlike Farouk's world, where Egypt is firmly at the forefront of scientific achievement, and often under attack by rival states.

The narrator of *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) says that the 26th century world is moving towards a “universal language” (“توحيد اللغة”), but this has not yet happened, because although he says that this is necessary for a specifically scientific reason, so that scientists can clearly communicate important concepts, people are too attached to their ideas of nationhood, valuing these more than the need to allow the gradual a new,

⁸²⁷ Ibid., p. 14.

⁸²⁸ Ibid., p. 15.

⁸²⁹ Ibid., pp. 19 – 21.

⁸³⁰ Ibid., p. 24.

⁸³¹ Ibid., p. 47.

⁸³² Ibid., p. 50.

⁸³³ Ibid., p. 12.

scientific language to evolve, or develop a new one. He does not specify which language should be chosen.⁸³⁴

Shāhīn's history lecture frames the old world, with its national boundaries, as essentially two large halves, the developed and the undeveloped world, which are only reconciled after the War, when all realise that they share in the common brotherhood of man.⁸³⁵ At the end of the novel, however, when the villain 'Abd Al-Karīm is contemplating a suicidal mission to Jupiter to atone for his betrayal of Shāhīn, he soliloquises that, despite this global racial mixing, there were still differences, and that these differences are the very heart of creation:⁸³⁶

وهو اختلاف في جوهر الخليقة...

The international spirit is not confined to this text; the Egypt of 2020 in Towfik's *Ūtūbiyā* (*Utopia*) finds the elite indifferent to international differences, unable to tell the difference between an American, an Egyptian or an Israeli.⁸³⁷ In the *Milaff*, No. 48 *Sijn Al-Qamr* (Moon Prison), the prison is run by the UN and the experts in terraforming are from Egypt, France and England,⁸³⁸ while No. 34 *Wahsh Al-Muḥīt* (Sea Monster) finds the Egyptian, Indian and Yugoslavian navies co-operating (the novel pre-dates the break-up of Yugoslavia). Al-Sharuni finds that in Sherif's *Sukkān al- 'ālam ath-thānī* (Inhabitants of the Second World), the nations that send emissaries to the ocean depths are from these same countries, Egypt, India and Yugoslavia.⁸³⁹

5.6 Government

European post-Enlightenment Utopias explored alternative forms of government; Jameson notes that drafting political constitutions was part of the eighteenth-century European Utopian landscape, inspiring Rousseau, Saint-Simon and Butler.⁸⁴⁰ The political spectrum of these fictional Utopian governments is broad, from the dystopian totalitarian nightmares of

⁸³⁴ Al-Quwīrī, *Min mufakkirah*, pp. 65 - 66.

⁸³⁵ Mahmoud, *Rajul taḥt al-Ṣifr* (Man Below Zero), p. 11.

⁸³⁶ Ibid., p. 95.

⁸³⁷ Towfik, *Ūtūbiyā* (Utopia), pp. 12; English version, p. 6.

⁸³⁸ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison), although the international language on the Moon is apparently English (p. 52).

⁸³⁹ Al-Sharuni, *Al-Khayāl al- 'Ilmi*, p. 42.

⁸⁴⁰ Jameson, *Archaeologies*, p. 16.

Orwell's *1984*, with what Bloch notes are the extreme conformist and controlling features of dystopian SF,⁸⁴¹ to works examining the relationship between individualism and collectivism and the (particularly American) fear of the 'hive mind' associated with communism⁸⁴² to those exemplifying Jameson's view that Utopian fiction, as a "representational meditation on radical difference" can be part of the fight-back against the march of late capitalism, and that the best Utopias are perhaps those dystopias that "serve the negative purpose of making us more aware of our mental and ideological imprisonment."⁸⁴³

In *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field), workers live in communal towers and are transported every day by airships to the fields where they toil. Although society is highly automated, with robots performing household chores, and the harvested spinach being wound into bales mechanically, and although robots have reached a level of sophistication that allows them to function almost like gods (as we find when Homo visits the Temple of the Electronic Minds at the end of the novel), the workers are still required to toil in a tightly controlled surveillance society, suggesting that the toil is not strictly necessary *per se*, but only part of the rulers' social control agenda. The computers in the Temple are able immediately to identify Homo and tell him his birthday and 'number', and that he is married to Layla, who works in the weather station.⁸⁴⁴

The level of surveillance is high, but shared to some extent with the populace; Layla uses her personal surveillance device ("جهاز الاستخبار الشغصى")⁸⁴⁵ to try and find Homo in his friend's flat, when he first goes missing; after that, her next step is to contact the local intelligence officer. Homo is also aware that he cannot escape scrutiny; as soon as he finds his escape route, he knows that it must be temporary, and he finds himself already formulating his excuses to the "Centre for Automated Inquiries" ("مركز التحقيقات الآلى").⁸⁴⁶

⁸⁴¹ "...totalitarianism, psychic control, white men in charge, no individualism. Overpopulation works", Robert Bloch quoted in Brian Stableford, *The Sociology of Science Fiction* (San Bernardino, CA: Borgo Press, 1987), p. 129.

⁸⁴² Griffiths sees the fear of the 'hive mind' as a narrative focus of Western writers in response to increasing social conformity (p. 161); he discusses the popular SF trope of Gestalt or collective intelligence, pp. 145 – 147. John Griffiths, *Three Tomorrows: American, British and Soviet Science Fiction* (London: Macmillan, 1980).

⁸⁴³ Jameson, *Archaeologies*, Introduction, pp. xii – xiii.

⁸⁴⁴ Mūsa, *Al-Sayyid*, p. 186.

⁸⁴⁵ Ibid., p. 18.

⁸⁴⁶ Ibid., p. 12. (Maha Maẓlum Khaḍr notes the primary narrative mode for both Homo and Layla is the internal voice, emphasising their isolation in a repressive society. "Bina' Ruwāyat al-Khayāl al-'Ilmī fī al-Adab al-Miṣrī al Mu'aṣir" (PhD Dissertation, Cairo University, 1999), p. 103.)

Television is broadcast by the state, which also imposes electricity cut-offs at night⁸⁴⁷ and runs schools and military camps.⁸⁴⁸ Every citizen has a number assigned to them at birth by the general administration committee of their region, and records everything for the intelligence services, even the details of mistresses.⁸⁴⁹ Partnerships (marriages in all but name, as the partners are intended to be companions as well as sexual partners) are centrally planned,⁸⁵⁰ and a local committee decides which couples can reproduce,⁸⁵¹ although their children are then conceived using pre-harvested sperm and eggs, and nurtured in a factory. Marriage partners are chosen by a panel of computers; Homo rejoices that the committee chose Layla for him:-

She whom thousands of electronic computers chose, after calculating the genetic and acquired purity of both of us, comparing it and contrasting it until in the end a final calculation came out. They were the best matched couple in every way, in their race, and in compatibility and diversity, with sufficient ability to allow them both a joyful and energising life, with the guarantee of healthy offspring, and a situation to allow them both to procreate!⁸⁵²

هى التى أختارتها الآلات الحاسبة الالكترونية له, بعد أن أحصت صفاته و صفاتها الموروثة و المكتسبة,
و قارنت و افترضت حتى خرجت فى نهاية الحساب يتلك النتيجة...أنهما أصلح شخصين للتكامل بالنسبة
لكل منهما, و فيهما من عناصر و التوافق و التناقض, القدر الكافى الذى يمنحهما حياة بهيجة
متجددة...مع ضمان نسل صحيح فى حالة السماح لهما بالنجاب!؟

Children from “a beautiful, clever mother and a strong, superior father” are born in child factories by the thousand.⁸⁵³ Although traditional marriage and parenthood have been abolished, as we learn from the regime representative’s speech in the Hanging Hall, people regret that children are no longer born in the usual way, but many citizens spend free time at the child factories every week, watching their children grow inside the glass tubes; this gives

⁸⁴⁷ Ibid., p. 11.

⁸⁴⁸ Ibid., p. 58.

⁸⁴⁹ Ibid., p. 29.

⁸⁵⁰ Ibid., p. 11.

⁸⁵¹ Ibid., pp. 17 and 24.

⁸⁵² Ibid., p. 90.

⁸⁵³ Ibid., p. 104.

the regime cause for concern, because it regards the separation of the child from the parents as important control factor.⁸⁵⁴

Governing regimes in the texts also use pacifying drugs; in *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field), these are ‘joy pills’ (”حبوب البهجة“),⁸⁵⁵ which are made from beer, and which Homo takes when he feels anxious or angry, while in *Rajul Taht al-Şifr* (Man Below Zero) it is Sa’ādūl, a drug given forcibly to a student who is disrupting Shāhīn’s lecture.⁸⁵⁶ When the rebel leader Barūf is defeated in the debate at the Hanging Hall, the voters choose to accept chemical treatments to make them docile (while Barūf is told that he is lucky that the regime does not kill him).⁸⁵⁷

The regime also uses holidays as release valves (Homo is offered a holiday after he absconds, and at the same time is threatened with having his salary stopped),⁸⁵⁸ as well as the general conversation parlour (”ملهى المناقشات العامة“), in which the workers may relax, drink beer and take joy pills and converse freely in cave-bars beneath the dwelling towers, and smoke cigarettes, although everything they say is recorded by the regime (the comments on his situation are played back by the regime to Homo during his interrogation).⁸⁵⁹ The regime also provides ‘free love salons’ (”صالون الحب الحر“); sexual exclusivity is not expected in partnerships, and participation is encouraged.⁸⁶⁰

Homo, his consciousness raised by the public discussion of his act of rebellion, discusses the problem of social conformity with his friend David:

Men have become similar to a worrying degree, David...clones in terms of their way of dress, and food, and thinking, and conducting their daily lives...all of their minds in general have gone bad, drowned in this flood of media and culture that overwhelms their minds through the mediums of the media, and general

⁸⁵⁴ Ibid., p. 158.

⁸⁵⁵ Ibid., p. 17.

⁸⁵⁶ Mahmoud, *Rajul taht al-Şifr* (Man Below Zero), p. 32.

⁸⁵⁷ Mūsa, *Al-Sayyid*, pp. 194 – 195.

⁸⁵⁸ Ibid., p. 48.

⁸⁵⁹ Ibid., p. 76.

⁸⁶⁰ A recurrent theme in SF, from Henry Neville’s *Isle of Pines* (1688) to Huxley’s *Brave New World* with its citizens conditioned to ‘sex-play’ from infancy, to ‘Azzām’s account of the Syrian author Dīāb ‘Ayd’s *Nadā’ Al-Kawkab Al-Akhḍar* (Call of the Green Planet), where visiting astronauts from Earth find that “the primitives in the forests...enjoyed sexual relations with them, while the civilised ones ferried them around in cars and aeroplanes, and also allowed them to have sexual relations with their girls”. ‘Azzām, *Al-Khayāl al-‘Ilmī*, p. 91.

culture...they have all become so that they think and behave according to a prescribed pattern....⁸⁶¹

وان البشر قد أصبحوا متشابهين الى درجة مقلقة فعلا يا دافيد...نسخ متطابقة من طريقة اللبس و الغذاء و التفكير و الأداء الحياتى اليومية...و كل العقول العامة قد أصبحت أسيرة و غارقة فى هذه الفيضان الاعلامى و الثقافى الذى يندفع فى عقولها من أجهزة الاعلام و الثقافة المركزية...و قد أصبحوا جميعا يفكرون و يتصرفون حسب الطريقة المطلوبة؟

Mūsa's hero is oddly prescient; although he does not predict the development of social media as such, this is perhaps one case of SF performing the predictive function on a topic of immense interest to governments, namely surveillance and control of media content.

The pull that Homo feels in this controlled society is that of individualism; when Layla tells him that he should visit the Free Love Salons in order to feel a greater sense of belonging to society, he tells her:

...you are pushing me strongly towards this kind of normalised, familiar social behaviour in order to help me feel harmonised and balanced in a short time, and so blend with this society, but now I feel a strong pull to harmonise with life itself, and I consider myself to be a spark of this life...?⁸⁶²

ها أنت تدفعينى دفعا للتصرف بالطريقة الاجتماعية المعتادة و المألوفة لأستعيد أنسجامى و توازنى بسرعة و أتلاءم مع هذا المجتمع. فى الوقت الذى أشعر فيه بانجذاب شديد للتلاؤم مع الحياة نفسها...التي أعتبر نفسى قبسا منها ..؟

The author's point, apart from demonstrating Homo's emotional attachment to Layla which forms part of the separation tragedy, appears to be that people in general do not want freedom, or to be exposed to the chaos of nature in the raw; Homo is an anomaly, a square peg, and is punished for his non-conformity.

Earlier, during his first escape when he reached the rocket launch area, Homo quickly realises that his new freedom is of no use, and becomes depressed and angry. Aware that he is only

⁸⁶¹ Ibid., p. 116.

⁸⁶² Ibid., p. 94.

free to walk along this road and that he has lost the way home to his routine, he feels alone and dissociated, “like a lost space capsule” (“مثل كبسولة فضائية ضائعة”).⁸⁶³ When he returns, he tries to persuade himself that the memory of his freedom will be enough to comfort him when he returns to his familiar life.⁸⁶⁴ During his subsequent interrogation, he is told by the regime, without the irony immediately apparent to the reader, that he is free:-

You, man, the fact that you are sitting in that interrogation chair does not mean in any way that you are not free, or that the abundant freedom that modern man enjoys, is a false or counterfeit freedom. Rather, it means, quite simply, that you have stepped out of your normal daily routine precisely prescribed for all who work in this fourth field for the production of green spinach leaves.⁸⁶⁵

ايها السيد, ان وجودك الآن على مقعد الاستجواب لا يعنى أبدا أنك ناقص الحرية...أو أن الحرية
الفضفاضة التى يتمتع بها الانسان المعاصر, حرية كاذبة أو مزيفة...انما يعنى ذلك ببساطة أنك قد
خرجت عن النظام اليومى المعتاد و المرسوم بدقة الجميع الشغيلة فى الحقل الرابع الموحد لانتاج أوراق
السبانخ الخضراء...

He is told that “any infraction threatens the innermost part of the regime”⁸⁶⁶ (“أى خروج على...”), and that this behaviour is a gateway to anarchy, disease, immorality, laziness, lies, bribery, theft and treachery. Homo accepts the regime’s rebuke and returns to his normal life; the regime’s agenda is reinforced by his friend David later when they both attend the lecture in the Hanging Hall. David tries to persuade his friend that the regime is paternal and benign:

...we must always remember that the regime really tries to solve our difficulties and problems...it loves and cares for us passionately, providing a happy life for every individual from the cradle to the grave, using everyone’s organised behaviour as a system for the preservation of all the basic types that make up human beings.⁸⁶⁷

⁸⁶³ Ibid., p. 27.

⁸⁶⁴ Ibid., pp. 27 - 28.

⁸⁶⁵ Ibid., p. 38.

⁸⁶⁶ Ibid., p. 40.

⁸⁶⁷ Ibid., p. 112.

علينا أن نتذكر دائما أن النظام يحول أن يحل معضلة عويصة فعلا... أنه يهيمن و يحمى و يوفر الحياة
السعيدة لكل فرد من المهد الى اللحد, عن طريق سلوك جماعى منظم مع الاحتفاظ بكل الصفات الأساسية
التي تجعل الانسان بشرا...

David goes on to compare human society with that of bees and ants, where the individual exists to serve society,⁸⁶⁸ a clear example that this world favours a ‘hive mind’ society of absolute conformity disguised as co-operativist service.

The rebel Barūf finds Homo after his release in a conversation parlour, where Homo’s interrogation is being publicly discussed. Barūf warns against the increased mechanisation of society, and asks the crowd to help him demand a return to ‘openness’ (“بالعودة للانفتاح”) and highlighting their lack of real freedom.⁸⁶⁹ During his later speech in the Hanging Hall, after which the world votes to allow Homo and Barūf to leave the domed world, Barūf reveals that he was once one of the ruling regime – a ‘Technocrat’ (“تكنوقراط”),⁸⁷⁰ and that “this regime is a dictator’s paradise” (“هذا النظام فردوس دكتاتورى”),⁸⁷¹ yet the regime asks for Barūf’s revolutionary programme to be put to a vote⁸⁷² (a long discussion follows in the corridors of the Hanging Hall, suggesting a democratic and open process).

The outcome is a decisive vote in the regime’s favour, suggesting either rigging or confidence in their arguments for what is best for mankind’s future; the regime is very careful to prepare the Exiters with the most advanced equipment for their survival outside, as it has won the right to govern the remaining people under the domes with absolute power. The last words of the novel are uttered by a couple embracing in a car near the giant glass exit doors. When they see Homo battering against them, asking to be let back in, they pity him and ask each other: Does he not know that time does not go backwards? (“هل نسى أن الزمن لا يعود الى الوراء؟”).⁸⁷³

⁸⁶⁸ Ibid., p. 113.

⁸⁶⁹ Ibid., p. 67.

⁸⁷⁰ Ibid., p. 161.

⁸⁷¹ Ibid., p. 199.

⁸⁷² Ibid., p. 174.

⁸⁷³ Ibid., p. 228.

The regime does not attach a particular ideological tag to its methods, which are shown, not told, although it describes the advent of agriculture as ending the first age of communism and beginning the age of individualism:⁸⁷⁴

مع اكتشاف الزراعة... فقد بدأت معها الملكية الفردية, و أذن العصر الشيوعي الألى بالانتهاء ...

This is part of a speech by the regime to convince the people to vote for its continuation, rather than the Exit strategy and return to nature advocated by Barūf. The regime chief goes on to identify the emergence of individual ownership as responsible for the most dangerous social system in human history, the family, as the cornerstone of its new society is the abolition of parenthood and the traditional family.

Al-Sayyid min Ḥaql al-Sabānikh (Lord of the Spinach Field) presents the most extreme form of governmental control; in other texts, there are signifiers of one-world government, with varying degrees of impingement upon the individual. The novel's ending is bleak; the reader is invited to conclude that Homo and Barūf's resistance to the regime is right, but for Homo, who is not suited to the violent outer world, Exit leads to what we presume is his death.

The nostalgia in this novel is for a time that cannot be recovered – it ends with the couple observing Homo, who is trying to get back in from the outside world, saying that time does not go backwards, touching upon the novel's repeated motif of nostalgia. The past is presented as a quaint country that the populace visit as tourists in the hospitals that give them the experience of disease, or the food museums that provided Homo and Layla with the recipe for Imam Bayıldı, but we also learn that the wars of the past are the reason why their society is contained inside a glass dome. Barūf's plea for a return to nature is unheeded and unwanted by the population, who vote for greater regime control, including the administration of drugs to render them more docile.

The most frequently-used phrase in the novel is “عصر العسل”, the “age of honey” in which the characters refer to themselves as living. It is repeated twenty-one times, and has the strong feel of a mantra imposed by the regime, which, we must not forget, is constantly listening to all of the population at all times. The rebel Barūf inverts its use in his first appearance in the

⁸⁷⁴ Ibid., p. 55.

conversation parlour after Homo's release, when he talks of the freedom of the human spirit: "But this truth has drowned, gentlemen, in the honey of this age!" ("لقد غرقت تلك الروح أيها السادة")⁸⁷⁵ ("...فى عسل هذا العصر!").⁸⁷⁵

Enayat traces elements of socialist or communalistic behaviours under Ottoman rule,⁸⁷⁶ finding support for the modern concept of socialism ("اشتراكية") from the founder of the Syrian Muslim Brotherhood, although Sayyid al-Qutb found the concept too closely associated with unbelief.⁸⁷⁷ Socialism is briefly referenced as a desirable form of government in *At-Tūfān Al-Azraq* (The Blue Flood), when the scientist, promoting the "Conquest and Renewal" ("الاستيلاء و الإصلاح") agenda that is an alternative to the Blue Flood that would wipe out humanity, pleads for the opportunity to seize power over the earth as it is and introduce unity and socialist community ("اقترح اتحادها و اشتراكها").⁸⁷⁸ The 26th century Libya of *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) has a 'World Council' ("المجلس العالمي"),⁸⁷⁹ which distributes news of scientific discoveries, suggesting a one-world government, but one that appears to be benign; the narrator-diarist is apolitical, although his claim that the charm of the houses that hang above the earth is that they are above the 'hubbub', implies that the sky-dwellers are of a higher class, and that there are still ground-dwellers.⁸⁸⁰

In *Rajul taht al-Şifr* (Man Below Zero), Mahmoud's anti-hero Dr Shāhin lectures to his London students on the origins of the one world society after the Third World War, although he frames it not a class war, but a race war. Although he figures underlying economic factors as key influencers, even these are overtaken by something in their souls that loves a fight; what would have been explained by 'the Marxist, Darwish'⁸⁸¹ one hundred years ago has been overtaken by changes in the world.⁸⁸²

⁸⁷⁵ Ibid., p. 65.

⁸⁷⁶ The practices of granting *waqf* and *hima*, common land: Hamid Enayat, *Modern Islamic Political Thought* (London: Macmillan, 1982), p. 147.

⁸⁷⁷ The word was 'jāhiliyya' (ignorance), the word for the pre-Islamic state of ignorance and polytheism before belief in Allah. Ibid., pp. 151 -152.

⁸⁷⁸ Al-Baqāli, *At-Tūfān Al-Azraq* (The Blue Flood), p. 93.

⁸⁷⁹ Al-Quwīrī, *Min mufakkirah*, p. 36.

⁸⁸⁰ Ibid., p. 13.

⁸⁸¹ This may be a reference to the Egyptian trades union layer Yusuf Darwish, rather than to the Palestinian poet Maḥmūd Darwish, as Mahmoud refers to him as "أنمة المادية الجدلية في ذلك الوقت", Mahmoud, *Rajul taht al-Şifr* (Man Below Zero), p. 10.

⁸⁸² Ibid., pp. 9 – 10.

National differences vanish as people realise their common humanity, and a one world government is declared on 1 January 2000. Governments are united in a general parliament, international scientists collaborate to combat the plague, and political unity is cemented by this victory, in particular, a unity characterised by socialism:

They fulfilled the political and philosophical dream that had not been realised during peace time... the dream of one world, and one government, where all resources were dedicated to the service of all, in true brotherhood, and where every person works at his task according to his ability, and takes what he wants according to his need.⁸⁸³

وحققت له حلم السياسة و الفلاسفة الذى عجز أن يحققه السلاح... حلم العالم الواحد و الحكومة الواحدة.
حيث كل الموارد مكرسة لخدمة الجميع في أخوة الحقيقية و حيث الكل يعمل في محنة قدر طاقته و يأخذ
بالمحبة قدر حاجته. قامت الاشتراكية أخيراً على أساسها الصحيح...

The Utopia is, in these words, incontestably a Marxist utopia. The new world order has created a socialist paradise of plenty; in the year 2063, bread and milk are fortified with vitamins and shops are open for 24 hours. Schools and hospitals everywhere were free of charge; clothes were also free, as was admission to cinemas, theatres and libraries, which were always open, and many diseases completely eliminated.⁸⁸⁴ Yet there are flaws in this system; Mahmoud's agenda here is not the Western secular 1960s agenda of religion-free peace and love. Shāhin goes on to state:-

It was proved by the statistics, unfortunately, that the number of incidences of mental illness and suicide had risen to twice what they were in the last days. The explanation offered for this phenomenon by the Russian psychologist Lyubov was that there were suppressed violent forces which needed to be released into the open by natural means. Lyubov advocated a return to free fighting, boxing, contests, yoga clubs and martial arts, commando trips into the depths of space, circus trapeze games, slapstick comedies, fun things, and bawdy criticism. He said that human beings should withdraw a little from the limitations of polite

⁸⁸³ Ibid., p. 16.

⁸⁸⁴ Ibid., pp. 28 – 29.

society from time to time, to safeguard their equilibrium and achieve a healthy psychological balance.⁸⁸⁵

ثنت بالإحصاء للأسف أن عدد حالات الجنون و الانتحار قد ارتفع إلى أضعاف ما كان عليه أيام التأخر و الرجعية. و كان التفسير الذى قدمه ال طبيب النفسى الروسى (ليوبوف) لهذه الظاهرة أن هناك طاقت عنف مكبوتة لا بد أن تفتح لها مخارج و مصارف طبيعية. وقد طالب ليوبوف بعودة المصارعة الحرة و الملاكمة و المبارزة و نوادى اليوجا و الصاعقة...و الرحلات الفدائية إلى أعماق الفضاء و ألعاب السيرك الخطرة و كوميديات التهريج و الإسفاف و النقد البذى...و قال إن الإنسان لا بد أن يخرج قليلاً عن حدود الأدب بين وقت و آخر ليحتفظ بتوازنه و صحته النفسية.

This is the dream of Utopia turned to anomie, and a warning from the religious author that a surplus society free of disease is no guarantee of human happiness, implying that the need to fight, to explore and to retain some element of primitiveness in the face of high civilisation is an essential part of humanity. A study of Mahmoud's non-fiction supports this interpretation: in *Ahlām* (Dreams) he says that Western television and cinema have corrupted 'us'.⁸⁸⁶ Mahmoud also saw Marxism as deeply damaging to Egyptian society, and his 1984 interview with *Al-Ahrām* stated that the natural ideological substitute after the fall of communism was Islam⁸⁸⁷ (provoking a counter-attack from Fouad Zakariyya, the secular philosopher and critic of Islamism).

The students quote the Qur'ān and the Bible to Shāhīn in support of Lyubov's thesis that something more than material prosperity is required for human happiness, but the student who declares himself disgusted by this modern age and disrupts the lecture is forcibly removed and injected with that new age's happiness drug. Other students however are free to express their views, less aggressively, on what is wrong with this surplus, energy-rich, disease-free society, and Shāhīn confesses a little apologetically that he does not know how to explain this mentality in the age of science and light ("في عصر العلم و النور...").⁸⁸⁸

⁸⁸⁵ Ibid., p. 29.

⁸⁸⁶ Moustafa Mahmoud, *Al-Ahlām* (Dreams) (Cairo: Akhbār Al-Yawm, 2004), p. 73.

⁸⁸⁷ Edition 6 November 1984, quoted in Moḥammad Riḍwān, *Muṣṭafa Mahmūd: Mishwār Al-'Umr* (Cairo: Dār Al-M'ārif, 2010), p. 39.

⁸⁸⁸ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero), p. 33.

The main theme of Ahmed Khaled Towfik's *Ūtūbiyā* (Utopia) is socio-economic polarisation. As the provision of *biroil* destroys Middle Eastern economies, the rich flee to Utopia, leaving the poor behind. Gaber explains this using statistics from the contemporary period (as the novel is set in the very near future, in 2020), highlighting the high rate of poverty and unemployment following the collapse of the oil economy, and in particular the crucial abolition of the middle classes that formerly maintained the peace, acting as a buffer between the elite and the impoverished. He uses the analogy of a rod in a nuclear reactor:

...the dissolution of the middle class that, in any society, plays the role of graphite rods in nuclear reactors: they slow down the reaction and, if it weren't for them, the reactor would explode. A society without a middle class is a society primed for explosion. That is exactly what happened, but the explosion didn't do away with the wealthy class. It decimated what remained of the middle class, and turned society into two poles and two peoples.⁸⁸⁹

...ذوبان الطبقة الوسطى التي تعلب في أي مجتمع دور قضبان الخرافيت في المفاعلات الذرية...إنها
تبتطئ التفاعل و لو لاها لانفجر المفاعل...مجتمع بلا طبقة وسطى هو مجتمع مؤهل للانفجار...و هذا هو
ما حدث بالضبط, لكن الانفجار لم يقض على الطبقة الثرية...لقد نسفنا تبقى نت الطبقة الوسطى, و تحول
المجتمع إلى قطبين و شعبيين...

The 'two peoples' polarisation motif is reinforced by a quotation from Egyptian *sha'bī* poet Abdel Rahman el-Abnoudi (we are two peoples...two peoples...two peoples...) It is quoted to the Utopian by Gaber shortly before his murder, as an attempt by Gaber to explain to the Utopian why he did not kill him, and again at the end by Germinal, somewhat prophetically, as she quotes the verse to counter the Utopian's view that the Others will forgive his crime. Gaber quotes the line to emphasise their commonality, but Germinal uses it to underline their differences.⁸⁹⁰

Farouk is ideologically nebulous with regard to forms of government; the 'ideal' elements in his futuristic Egyptian society are the use of technology against foreign spies and aliens, and Egypt's position as a world leader. In No. 74 *Al-Širā' Al-Jahannamī* (Hellish Struggle), we

⁸⁸⁹ Towfik, *Ūtūbiyā* (Utopia), p. 125; English version, p. 108.

⁸⁹⁰ Ibid., p. 137; p. 162; p.167; English version, p. 119; p. 142; p.146.

learn that Nūr has a country estate⁸⁹¹ (formerly his grandfather's), placing him as part of the elite, but the political ideology, such as it is, in the *Milaff*, manifests itself as ostensibly pro-democratic; in No. 67 *Shayṭān Al-Faḍā'* (Satan of Space), Fakhry says on that he is "a free man living in democratic country",⁸⁹² while in No. 34 *Waḥsh Al-Muḥīṭ* (Sea Monster), the prince tries to impress the team by telling them that their empire is a democracy.⁸⁹³

No. 86 *Al-Imbirāṭūr* (The Emperor) is the most interesting *Milaff* text in terms of Farouk's political views, as Egypt rejects despotism and declares freedom and independence as its core political values. At a UN emergency meeting, Egypt alone refuses to give in to the villain, a Jewish German working for the Americans who is trying to make himself emperor of the earth, saying that they and all Arabs refuse to submit, preferring death defending their states and freedom to life under the yoke of an emperor:⁸⁹⁴

...رفض (مصر)، و المجتمع العربى كله الاستسلام، وأن العرب يفضلون الموت دفاعاً عن ديارهم و حريتهم، و عن الحياة فى نير إمبراطور مجنون

to which the American retorts that this is always the Arabs' way; they can't understand the danger, until after the event:⁸⁹⁵

هكذا العرب دائماً، لا يقدرّون الخطر، إلا بعد الوقوع فيه

Farouk makes the British envoy speaks up for the Arabs, saying that they possess great dignity that prevents them from capitulating to men who do not believe this:⁸⁹⁶

ولكنهم بمتلكم كرامة قوية، تمنعهم من الخضوع لبشر لا يقتنعهم به

⁸⁹¹ Farouk, No. 74 *Al-Ṣirā' Al-Jahannamī* (Hellish Struggle), p. 5.

⁸⁹² Farouk, No. 67 *Shayṭān Al-Faḍā'* (Satan of Space), p. 73.

⁸⁹³ Farouk, No. 34 *Waḥsh Al-Muḥīṭ* (Sea Monster), p. 56.

⁸⁹⁴ Farouk, No. 86 *Al-Imbirāṭūr* (The Emperor), p. 68; Al-Sharuni describes Nihad Sherif's ideal city in *Sukkān al-'ālam ath-thānī* (Inhabitants of the Second World), which has four elected officials ruling for four year periods, with a revolving presidency every year, and a consultative assembly of thirty members, again elected. It has an executive committee with sub-committees for arts, society, education and work and leisure, and no differences are acknowledged between race, colour or creed. The state has two sources of law, French civil and Islamic: Al-Sharuni, *Al-Khayāl al-'Ilmi fī Al-Adab*, p. 45.

⁸⁹⁵ Farouk, No. 86 *Al-Imbirāṭūr* (The Emperor), p. 68.

⁸⁹⁶ Ibid, p. 93.

At the end, the American realises that the Egyptians have triumphed again and that Americans are no longer the rulers of the world.⁸⁹⁷ The Soviet [sic] envoy asks the Egyptians if they will now rule the world, but the Egyptian replies that “they never have and never will – they are a free people (”شعب حر“) and will defend their independence.”⁸⁹⁸

Although democracy is vaguely favoured in the *Milaff*, no particular governance system is privileged, although Nūr’s description to the alien Būdūn of a society where people share in No. 58 *M’araka Al-Kūwākib* (Battle of the Planets) is scorned by Būdūn, not only because he observes that this is not the case on Earth, but because he says that “only the weak speak of peace, only the weak, but we, in Arghurān, we know nothing but war and victory, only victory.”⁸⁹⁹ As Būdūn is still an enemy at the time when he makes this statement (he later repents of his enmity towards the Earth and becomes Nūr’s friend), the reader is invited to assume that the alien is wrong.

The texts debate ideal government obliquely, unlike the prescriptive Western prototypes, engaging with the problems of government by describing the worlds they create. Towfik’s *Ūtūbiyā* (Utopia) of course explicitly appropriates the title of the West’s eponymous first Utopia. It is an immediate invitation to the reader to calibrate this Utopia on the scale between the ideal city and dystopia, with the narrative flicking back and forth between the two narrators highlighting the chiaroscuro effect. There is little room for ambiguity; one world is governed by gang violence, the other by wealth, and the protagonists’ actions determine who the reader identifies as ‘right’. Towfik does not debate forms of government, but shows us the consequences of the uneven distribution of wealth and of regional over-reliance on a rentier economy dependent upon one product.

The other texts rarely engage with forms of government or ideology, although Farouk shows a slight bias towards democracy, and Mahmoud’s vision of 2067 has a one-world government run along socialist lines that still somehow fails to satisfy. *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) is the most political of the texts, again obliquely through the description of the surveillance society providing cradle to grave care, via child factories and space burials, and its carefully controlled outlets for human emotion that mimic the quotidian

⁸⁹⁷ Ibid., p. 120.

⁸⁹⁸ Ibid., p. 121.

⁸⁹⁹ Farouk, No. 58 *M’araka Al-Kūwākib* (Battle of the Planets), p. 104:

”لا يتحدث عن السلام سوى الضعفاء...الضعفاء فقط، أما نحن، في (أرغوران)، فنحن لا نعرف سوى الحرب...والبصر...النصر وحده...”

freedoms of today (the ‘real food’ days, and the discussion parlours), a world outside of which Homo realises too late that an ‘everyman’ cannot survive. While Homo’s dreams of romping through the jungle with Layla mirror Nādir’s fantasies in *At-Tūfān Al-Azraq* (The Blue Flood) about himself and Tāj on a Fijian beach in their primitivism and exoticism, both of these dream-worlds are modes of escape from an unbearable reality; Homo’s from panopticon regime control, and Nādir’s from his sexual repression and life in the West. Although Homo’s story ends in despair as he is shut into the nightmare Eden that he sought, the stifling control of the regime as the only alternative is shown to be equally bleak.

5.7 Labour and Leisure

An ideal society is very often figured as a surplus society, but such a society, where food and energy supplies are abundant and secure, and where labour is unnecessary or automated, potentially creates a new problem associated with prosperity. Surplus societies in SF are evidence that science has succeeded in solving the problem of the supply of basic material requirements, but the problem of the sudden expansion of leisure time then creates the problem of boredom, lack of purpose and, in terms of fiction, potentially no story in the absence of resource-based conflict.⁹⁰⁰

The dream of a workless society is the dream of Cockaigne, an English mediaeval fantasy-world where no-one works, and food magically appears;⁹⁰¹ for Jameson, the notion of collective effort would have been assumed in a mediaeval village context, but post-surplus Utopias remove the Marxian alienation of the worker from his product.⁹⁰² Olaf Stapledon’s *Star Maker* (1937) features immobile citizens enjoying ‘bed-ecstasy’, a catatonic state of addiction to an early form of the internet, what Jameson calls “the poisoned gift of free time.”⁹⁰³ Robert Matthew’s study of Japanese SF devotes an entire chapter to ‘jaded literature’, the problem of boredom and inertia in a world made lazy by technology. In the Arab world, Davison points to the problem of excessive leisure time among the youth of

⁹⁰⁰ Edward James, Chapter 16 “Utopias and anti-Utopias”, in James and Mendlesohn, *Cambridge Companion*, pp. 224 - 225.

⁹⁰¹ Ibid.; see also Jameson, *Archaeologies*, on work and labour in Western Utopias, pp. 149 – 155.

⁹⁰² Jameson, *Archaeologies*, p. 150; Jameson’s grand design for Utopia includes “the abolition of property, the complementarity of desires, non-alienated labor, equality of the sexes.” Ibid., p. 145.

⁹⁰³ Ibid., pp. 154 - 155. This ambiguity about excess leisure is rooted in Jameson’s distrust of the excessive valorisation of productivity.

Dubai;⁹⁰⁴ the problem of wealthy Gulf teenagers racing sports cars on freeways is replicated in Towfik's *Ūtūbiyā* (Utopia), where the Utopians race their Ferraris for fun.⁹⁰⁵ In this novel, the Egyptian elite enjoy an extreme version of the surplus, leisure society but also experience the frustrations of its attendant anomie. Living almost free of rules, the teenage anti-hero indulges in as much sex and drugs as he wants but is permanently dissatisfied, leading to his decision to participate in a human hunt that ultimately signals the beginning of the end of this sharply polarised dystopian society.

Despite the element of hard agricultural labour, the society of *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) is arguably a leisure society. The regime provides 150 days' holiday per year, 100 of which are used up in holiday tours organised by a general committee, to old zoological gardens, or the museum of ancient food and other relics of the ancient peoples, or to the oceans, or to space – and the remaining 50 days were for sitting around, talking or arguing.⁹⁰⁶

There is no hunger in this world, although food is bland pabulum, served via tubes in the walls, with different tubes for hot and cold food;⁹⁰⁷ this unappetising pap is produced in protein factories (“معامل البروتين”).⁹⁰⁸ There is a food museum, where Homo and his wife are delighted to find an ancient recipe for Imam Bayıldı, a Turkish eggplant dish; cooking is permitted only on one day every month, and the citizens are given whatever raw ingredients they ask for on that day.⁹⁰⁹ Eating real food is a quaint, nostalgic act that is strictly controlled; we later learn that this nostalgia is deliberately fostered by the regime as a form of distraction.⁹¹⁰ In the same way as the people of Homo's world sometimes take ‘sickness holidays’ where they enjoy being infected by old diseases, people are nostalgic for the feeling of hunger; and Homo longs to work to obtain his food:

He felt hunger now only for the first time; that hunger that he had read about so often in books that told ancient, marvellous stories, about the people who lived in

⁹⁰⁴ Christopher Davidson, *Dubai: The Vulnerability of Success* (London: Hurst and company, 2008), p. 179.

⁹⁰⁵ Towfik, *Ūtūbiyā* (Utopia), pp. 26 – 27; English version, pp. 19 – 20.

⁹⁰⁶ Mūsa, *Al-Sayyid*, pp. 55 - 56.

⁹⁰⁷ Ibid., p. 45; also, the regime in its defence speech in the Hanging Hall tells us that “Every man can eat what he needs at any time he wants, without effort or thought” (p. 116) and rubber trees are engineered to provide material to make fabric to clothe the populace (p. 81).

⁹⁰⁸ Ibid., p. 13.

⁹⁰⁹ Ibid., pp. 20 - 21.

⁹¹⁰ Ibid., p. 59.

the ancient past, now extinct. A time when people could die because they had nothing to eat, while their neighbours died from eating more than they needed. A time when people ate animals and birds and those small, lovely creatures, fish and domestic animals. They were very happy to reach the end of their lives at 70...or maybe 80 years at the most...whereas humans now live on average 150 years...⁹¹¹

هو يشعر بالجوع لأول مرة...ذلك الجوع الذى سمع عنه كثيرا من تلك الكتب التى تحكى حكايات قديمة عجيبة عن الناس الذين يعاشوا فى زمان قديم مضى و انقضى...زمان كان يموت فيه ناس لا يجدون ما يأكلون, بينما جيرانهم يموتون لأنهم يأكلون اكثر مما يحتاجون...زمان كان الناس يأكلون فيه الحيوانات و الطيور و تلك المخلوقات الصغيرة الجميلة من الاسماك ز الدواجن...بشراهة كبيرة كانت تؤدى بهم فى النهاية الى الموت بعد صبعين ..أو على الأكثر ثمانين عاما...بينما الانسان الحالى يعيش فى المتوسط مائة و خمسين عاما.

He said to himself, I'll do what those ancestors did when they distanced themselves from hunger and worked for their food with all of their intelligence and feelings!⁹¹²

وقال لنفسه: ها أنذا أفعل مثلما كان يفعل هؤلاء الأسلاف حينما يستعبد بهم الجوع فيشغل الطعام كل أفكارهم ومشاعرهم!

Homo's interrogators refuse to believe that Homo's actions resulted from unhappiness:

Our system now provides work, food, warmth, housing, knowledge, art and everything you could possibly need. We have wiped out many microbes, and the reasons for those silly wars. We have organised birth and death. Man has become free, in every sense of that word, the system works to protect life with its surveillance and intelligence, by guaranteeing the behaviour of men, every aspect is strictly governed, and the fruit of it is that leisure is provided to the citizens, and comfort, in a just way – and so man has become free!⁹¹³

⁹¹¹ Ibid., pp. 25 - 26.

⁹¹² Ibid., p. 26

⁹¹³ Ibid., p. 37.

...قد وصلت بالانسانية الى نظام عام لتوزيع العمل و الطعام و الدفء السكنى و التعليم و الفن و الكماليات الوفيرة... و قد أمكن القضاء على جميع الميكروبات, و أسباب الحروب السخيفة... و أمكن تن تنظيم عمليات الوفاة و الولادة... و أصبح الانسان حرا بكل ما تحمله تلك الكلمة من معان متسعة... فلم يعد النظام العام الذى يدير الحياة فى المعمورة الآن, فى حاجة الى نوع من أنواع الرقابة أو المباحث أو المخابرات, لمراقبة الناس و ضمان تصرفاتهم... ان كل شىء قد أصبح يدار باحكام شديد... و جتيع النتائج و الثمار, توزع على الموطيب رخاء و رفاهية, بطريقة عادلة... و هكذا أصبح الانسان حرا.

The reader is invited to sympathise with Homo's wish for actual, non-regulated freedom, a sympathy that foreshadows the tragic result when he obtains it.

Al-Quwīrī also treats the problem of excessive leisure seriously in *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born). His narrator-diarist bickers with his wife over what amusement to enjoy next, and he rebukes her impatience, telling her that “any world would be troublesome to live in if we liked everything around us and you got everything you wanted at once.”⁹¹⁴

أي عالم مزعج سيكون لو تأرخح حولك كل شىء و أعطى وجوحا متسارعة.

The narrator and his wife are content with their leisure society, where people work for three or four hours each day; although they discuss about its perceived dangers, he concludes that this freedom from excessive work is a social good, misunderstood by some in a similar way to the emancipation of women:

In the old days, people used to fear leisure, and said that achieving an abundance of material things would lead – in the end – to laziness and the loss of initiative by taking away motivation to work and struggle in life... turning work from a moral and psychological and edifying necessity, to creativity, is the principle of freedom. Just as most historical ages disapproved of freedom for women, so today people disapprove to the same degree of separation from work.⁹¹⁵

كانوا – فى الماضى – يتخوفون من الرخاء, و يقولون إن تحقيق الوفرة المادية لكل إنسان سيؤدي – فى النهاية – إلى الكسل و تلاشي الابتكارات بحكم انتفاء حوافز العمل و المجاهدة من أجل العيش... أن يتحول

⁹¹⁴ Al-Quwīrī, *Min mufakkirah*, p. 27.

⁹¹⁵ Al-Quwīrī, *Min mufakkirah*, pp. 37 - 38.

العمل إلى ضرورة أخلاقية و نفسية و جمالية, إلى إبداع اختياري حر. فمثلاً كان مستهجنًا في معظم العصور بيع عفة المرأة, فإن امتناع الفرد عن العمل مستهجن اليوم بنفس الدرجة.

The characterisation of work as good for its own sake is framed as old-fashioned, and the drive towards more leisure time as progressive.

In the *Milaff*, the only workers that we see are the scientists, and the novels do not give a sense of a larger general populace, other than the large numbers killed in alien invasions, as they tend to feature only the team, scientists, villains, spies and aliens. We rarely see the team at leisure, as they are mainly occupied with defending Egypt from attack, but there are occasional moments before a mission where we see Nūr and Salwa relaxing together. Mahmoud's *Rajul taht al-Ṣifr* (Man Below Zero), though set in a surplus society as described during Shāhīn's lecture, serves mainly a narrative foregrounding for Mahmoud's deconstruction of this society as ideal or perfect and his explanation of why full provision of material needs does not guarantee human happiness (Mahmoud's solution being belief in God).

The problem of automated labour, given a kind of metal personhood in the form of robots, is figured by McGuire as a particular problem for Marxists, as free labour distorts the labour market⁹¹⁶ (a scenario explained and mined for comic effect in British fantasy by Terry Pratchett's *Making Money*).⁹¹⁷ Robots appear most often in SF as a subaltern or underclass, physically powerful slaves whose intelligence and strength must be carefully calibrated against their obedience for fear of revolt and overthrow,⁹¹⁸ or simply as an enactment of the 'other', a kind of home-made alien.

For Wanda Raiford, the fear of robot rebellion in the work of Kapek (the originator of the term, from the Czech *robota*, worker) is analogous to the former American fear of slave revolt, and the threat of robot revolt is the driving narrative in Asimov's *I, Robot* collection (1950) and Philip K Dick's *Do Androids Dream of Electric Sheep?* (1968). A century earlier,

⁹¹⁶ McGuire, *Red Stars*, p. 53.

⁹¹⁷ Pratchett's golden golems must abjure free labour and bury themselves at the end of the novel in order for the labour market to be balanced. Terry Pratchett, *Making Money* (London: Corgi, 2008). 'Azzām points to Tommaso Campanella's *City of the Sun* as predictive of the crisis that would follow mass automation replacing slaves; 'Azzām, *Al-Khayāl al-'Ilmī*, p. 29.

⁹¹⁸ Schneider, *Science Fiction and Philosophy*, p. 261 notes that Bicentennial Man and robots in general are analogues of slaves.

Butler's *Erewhon* (1872) predicted robots causing the end of civilisation.⁹¹⁹ This fear of the robot as subaltern or other is balanced by the fear of technology advancing to the extent that they may become indistinguishable from humans, calling into question our unique, organic human value.

The robots in *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) appear to be benign household assistants (although in an aside, they produce weak beer; the beer that David brings back from his work at the brewery to share with Homo at home is so diluted that its almost half-water, apparently a characteristic of beer produced by robots.)⁹²⁰ Barūf warns the audience in the Hanging Hall that the robots have become self-aware (as discussed in Chapter 4), and framing Homo's absconding as an act of righteous rebellion against what he sees as greater robot control. When Homo accidentally wanders into the Temple of the Electronic Minds, the computers function as spiritual guides (although the very human Homo is tired, and falls asleep during their lecture). The computers match couples and run the child-factories, but it is men, intelligence officers and the regime chiefs, who run the society. Although the role of the computer banks in the Hanging Hall in relation to the regime is not made entirely clear with regard to ultimate control, it is obvious that they are no subaltern actors.

Robots do not feature frequently in the *Milaff*, as the main recurring robot character, the Atlantean S-18, is an alien construct, the most familiar dilemma surrounding robots in SF, namely the risk of a machine turning against its inventor, is not a human problem (although we are told that the only reason that S-18 obeys Nūr is that he contains a single lead-covered wire that is a trip-switch for receiving new orders and he is now on Nūr's side, and programmed to recognise his instruction language as Arabic).⁹²¹ The *Milaff* therefore has little to say about mass robot rebellions, or the effects of mass use of robots in the workforce. The only relevant comment is made in No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), when a security guard in the ferry office is checking a multi-screen CCTV panel and saying to himself how boring his job is, and how, in spite of technological advance in

⁹¹⁹ Wanda Raiford, "Race, Robots and the Law", in Donald M. Hassler and Clyde Wilcox (eds.), *New Boundaries in Political Science Fiction* (Columbia: University of South Carolina Press, 2008), pp. 93 – 112.

⁹²⁰ Mūsa, *Al-Sayyid*, p. 11.

⁹²¹ Farouk, No. 49 *Ghazw Al-Ard* (Invasion of the Earth), p. 15.

security, the building still needs a human guard.⁹²² The problem of human dispensability, the feared consequence of robot or AI dominance, does not arise in this series.

5.8 Colonialism and Race

SF's explorations of 'other' places, such as space or a forgotten prehistoric world on earth, usually by a military or quasi-military force, are often analogies of imperial expansionism; Said considered Verne, with his buccaneering scientist-explorers, to be a "servant of empire".⁹²³ Jameson finds Wells' *War of the Worlds* (1897) to be "patently a guilt fantasy", based on Victorian colonial brutality, specifically the treatment by European colonialists of indigenous Tasmanians;⁹²⁴ Suvin quotes Wells' own analogy between European decimation of Tasmanian society and Martian invasion in the first chapter of *War of the Worlds*.⁹²⁵ Rieder notes that some texts enact "the missionary fantasy of others being childlike and needing guidance", whilst in others (such as Wells' *The Island of Doctor Moreau* (1896)) "some of the racism endemic to colonialist discourses is woven into the texture of science fiction".⁹²⁶

These are criticisms of influential texts originating from the hegemonic societies of their day. One might expect Arab SF authors to write from the point of view of the colonized, subject to the colonisers' technology (or deprived of it after independence; Fanon observed how colonial powers tended to withdraw their technical personnel after independence.)⁹²⁷ In fact, the texts considered here rarely engage with specifically colonialist discourse,⁹²⁸ with the exception of the *Milaff*. Quwīrī's 26th century Libya does not aspire towards world dominance, inclining rather towards the internationalism predicted in Mahmoud's 2067

⁹²² Farouk, No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), p. 5: يا لها من مهنة مملّة!! برغم كل هذا التقدم الهائل في وسائل الأمن، ما زال المسئولون يصرون على قيام العنصر البشرى بالحراسة.

⁹²³ Edward Said, *Orientalism* (Reprinted with a new Preface. London: Penguin, 2003), p. 227; Said also speaks of Verne as having been "co-opted into expansionist fervour" (p. 218). He sees the sister genre of 'magical realism' as symbolic of the political imperatives of post-colonialism and the relative detachment of postmodernism (p. 351).

⁹²⁴ Jameson, *Archaeologies*, p. 265.

⁹²⁵ Suvin, *Metamorphoses*, p. 208.

⁹²⁶ John Rieder, *Colonialism and the Emergence of Science Fiction* (Middletown, CT: Wesleyan University Press, 2008), p. 97.

⁹²⁷ Franz Fanon, *The Wretched of the Earth*, tr. Constance Farrington (Harmondsworth: Penguin Books, 1967), p. 76.

⁹²⁸ Others may do so: 'Azzām's account of Yūsuf Al-Sibā'ā's *Lasta Waḥdak* (You Are Not Alone) (1975) shows spacemen travelling to one of Mars' moons and discovering tree-people there, whom they transform into humans and rule as gods; their 'civilising' mission failed as the tree-people could not choose a successor and reverted to arboreal form after the astronauts returned to Earth. 'Azzām, *Al-Khayāl al-Ilmī*, p. 71.

future-world in *Rajul taht al-Şifr* (Man Below Zero) and to some extent also seen in Al-Baqqālī's *At-Tūfān Al-Azraq* (The Blue Flood). Towfik's *Utūbiyā* (Utopia) is set entirely in Egypt and pits Egyptians of differing social-economic classes against each other; the elite acting as colonists in the sense that they live at a distance from the poor and appropriate their choice of resources. Shut within their enclave, the elite depend upon US Marines for their security services, and we learn in the first pages that the elite use Israeli doctors and appear to have no quarrel with the Israelis over the status of the Palestinian territories.

In the *Milaff*, Egypt's declarations of independence at the UN meeting in No. 86 *Al-Imbirātūr* (The Emperor) can also be read as a response to colonial occupation. In No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), the alien villain Farid tellingly masqueraded as Nicolas, an assistant to Napoleon who helped him to plan his Egyptian campaign,⁹²⁹ while earlier in this novel, when the evil Dr Azma accuses Nūr of wasting time trying to sow doubt in everyone's mind, Nūr replies that this is the method of the colonizing country, not of an investigation.⁹³⁰

However, criticism of colonialism in the *Milaff* does not extend to the Egyptian conquest of space in the many battles with aliens, as this Egyptian project is deemed to be benign;⁹³¹ in No. 50 *Al-Uṣṭūra* (The Myth), we find Nūr treating the friendly savage Kūdūr in a primitivist vein as a child-like ingénue in need of rationalist instruction.⁹³² Resistance to occupation is the theme of the *Iḥtilāl* series Nos 76 - 80,⁹³³ and the *moqāma* theme is repeated again in No. 158 *Ḥarb Al-Ghad* (Tomorrow's War), when Nūr and the team wake up after thirty years of sleep to find themselves in a post-war world ruled by a shadowy figure. Although the team find themselves fighting spies from America, Israel, Britain and the US throughout the series, and these 'colonial' powers are depicted as villainous, the main engagement with colonialist discourse is through the attempts of aliens to conquer the Earth and the ultimate supremacy of the Egyptian team.

⁹²⁹ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 123.

⁹³⁰ Ibid., p. 64.

⁹³¹ Farouk, No. 98 *Nīrān Al-Kawn* (The Fires of the Universe), Nūr asks the chief for two years' leave to keep his promise to Būdūn by going back to Arghurān to liberate it.

⁹³² Farouk, No. 50 *Al-Uṣṭūra* (The Myth), p. 8: Nūr says it is wonderful to look at the stars and the moon, but Kūdūr reacts to the word 'moon', saying that the night is lit up by the god of the horizon. Later Kūdūr is amazed by Nūr's watch, which contains a powerful small computer that deciphers the code written on columns barring their progress. Kūdūr is astonished that such a small device can do this, and Nūr tells him that this is technology (p. 70).

⁹³³ Farouk, No. 76 *Al-Iḥtilāl* (The Occupation), No. 77 *Al-Moqāwama* (The Resistance), No. 78, *Al-Sirā'* (The Struggle), No. 79 *Al-Tuhaddi* (The Threat) and No. 80 *Al-Naṣr* (The Victory).

The team are overtly patriotic throughout the series without exception; in No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), an enemy points his gun at Salwa and asks Nūr to choose between his friends or his country. The team all tell the gunman that they choose their country, and so disarm him.⁹³⁴ At the start of a mission, Nūr is always ready with a military salute to serve his country.⁹³⁵

Arab scientists who have worked abroad are shown as happy to be returning home with their skills; in No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), Nūr meets Dr Sami again and asks about the scientists who have worked abroad such as Dr Munir, a propulsion expert, and is told that they are happy to work for their home country Egypt.⁹³⁶

While the future Egypt's pre-eminence on the world stage is normally drawn as a consequence of its scientific prowess, in No. 69 *Al- 'ālam Al-Akhar* (The Other World) a captured Nūr on a mysterious duplicate Earth wonders if its inhabitants "have geniuses like Leonardo da Vinci, Michaelangelo, Pablo Picasso, Salvador Dali or Adham Wanly or Jamal Qutub",⁹³⁷ Farouk deliberately juxtaposes the great artists of the Western canon with Egyptian painters who do not enjoy the same level of worldwide acknowledgment in order to elevate their importance to the notional audience.

In the other texts considered here, most of which are set in the future, the authors' narrative agendas prioritise concerns about the future, rather than allegorising colonial history. This fits with Csicsery-Ronay, Jr.'s finding that the concept of nation is largely excluded in SF as a recent ideological construction, or rather, an apparent assumption in futuristic literature of a totalitarian 'one world order', where nations become obsolete.⁹³⁸ Racism is frowned upon by the totalitarian regime in *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field) not

⁹³⁴ Farouk, No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), p. 97.

⁹³⁵ Farouk, No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), p. 6 he is always at the chief's command when the matter concerns the good of the country; also at No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 13, "Officer Nūr, always at his country's service". (Farouk is also the author of the popular *Rajul al-Mostaḥīl* (Impossible Man) series, featuring a James Bond-like Egyptian spy, Adham Šabry.)

⁹³⁶ Ibid., p. 45.

⁹³⁷ Farouk, No. 69 *Al- 'ālam Al-Akhar* (The Other World), p. 55.

⁹³⁸ Csicsery-Ronay approves of this characteristic; "This antipathy to nationality is in step with the leading contemporary globalist and world-system theories." Csicsery-Ronay, Jr., "Dis-imagined Communities" [the title is a play on Benedict Anderson's *Imagined Communities: Reflections on the Origins and Spread of Nationalism*, 1998], in Veronica Hollinger and Joan Gordon, eds., *Edging into the Future: Science Fiction and Contemporary Cultural Transformation*, (University of Pennsylvania Press, Philadelphia, 2002), pp. 218 - 222.

because it is immoral, because race loyalty is itself a threat (and framed as one of the reasons why they encouraged test tube births, to abolish parental and racial loyalty).⁹³⁹

The images popularly associated with the original texts of modern Western SF are often those of conflict with the ‘other’ – with aliens, or robots, non-human adversaries frequently depicted in monstrous human form on the covers of the 1930s American pulps. The military tone and content of these early works typically frame this other as an enemy, playing out a fantastical Cold War, or other militaristic fantasies, across the final frontier of space (for example, the work of Heinlein and Asimov). This mode of opposition to the alien channels the familiar anxieties about the ‘other’ so relentlessly pilloried by Said in *Orientalism*. It is therefore worth exploring how a particular SF literature approaches other races – broadly speaking, according to sets of taxonomies such as physical similarity, language and culture that notionally make up a ‘race’ – to see if and how they reflect racial tensions within their production milieu.

It should be noted that the popular perception of the Western SF ‘othering’ of aliens and figuring of them as inimical to man is not universal. Stableford notes that all translated Russian and East European SF represents aliens as friendly rather than menacing; Strugatsky’s ‘friendly alien’ fiction was censored by the Russian authorities.⁹⁴⁰ Also, the alien as ‘other’ is not necessarily condemned to be only an enemy, or oppressed subaltern. Standing outside normal society, it can be a social commentator, ideally placed to question an allegorical earthly status quo.⁹⁴¹

The non-human status of robots potentially figures them as avatars for a discourse on race; Wanda Raiford sees robots presented as having African-American characteristics in Asimov, as well as in the US television shows *Battlestar Galactica* and *Star Trek*, and wonders if in

⁹³⁹ Mūsa, *Al-Sayyid*, pp. 149 - 150.

⁹⁴⁰ At the time of writing (1987), Stableford, *Sociology of Science Fiction*, p. 116.

⁹⁴¹ Allen and Fedwa Malti-Douglas describe an Algerian comic strip by Slim called *Une loubia pour un marsien naïf*, which combines fish-out-of-water comedy with social critique as the Martian finds corruption everywhere, only to reassure the hero at the end that revolution on their planet ended a similar situation; Douglas and Malti-Douglas, *Arab Comic Strips*, p. 193. ‘Azzām points to two Arabic SF works, Omran’s *Kānū min Al-Kawkāb Al-Khāmis* (They Came from the Fifth Planet), and Sherif’s *Raqm 4 Yā’mrikum* (Number 4 Commands You), which show concerned aliens visiting Earth to counsel against nuclear war. ‘Azzām, *Al-Khayāl al-‘Ilmī*, p. 75, p. 82.

this respect “science fiction may serve a set of uniquely American needs”.⁹⁴² ‘Uniquely’ may be redundant here; although the othering of robots along such racial lines may well be a real feature of American SF, robots remain ‘other’ in any literature and may serve the same needs in any society with an historical racial subaltern.⁹⁴³

The allegorical qualities of Western SF in this respect are well documented; James, discussing the race question in American SF in “Yellow, Black, Metal and Tentacled”, recalls the early American ‘yellow peril’ narratives of the early twentieth century;⁹⁴⁴ the Panshins recall the same theme of the fear of Oriental domination in Buck Rogers’ encounters with the Han Chinese,⁹⁴⁵ as does Csicsery-Ronay, Jr., who also notes Verne’s use of nationality as an important identifying mark of his scientific heroes.⁹⁴⁶

These literary responses were contemporary reactions to real fears; In Japanese SF, Sharon Orbaugh argues that, despite replicating Western science culture very successfully, the Japanese still felt that they were not fully accepted by the West as racially equal, and she suggests that this perceived rejection precipitated the dominance of monsters in their SF literature.⁹⁴⁷ Stableford traces a softening of the ‘alien menace’ theme in Western SF as the twentieth century progressed, as a response to the introduction of racial discrimination laws.⁹⁴⁸ For Roberts, SF is “predicated upon a fundamental *hospitality to otherness*”,⁹⁴⁹ but perhaps this would be better expressed as a fundamental ‘interest’ in otherness; whether or

⁹⁴² Wanda Raiford, “Race, Robots and the Law”, chapter in Donald M. Hassler and Clyde Wilcox (eds.), *New Boundaries in Political Science Fiction* (Columbia: University of South Carolina Press, 2008), p. 94.

⁹⁴³ For an introduction to the treatment of race in Western SF, see Elisabeth Anne Leonard, Chapter 19 “Race and Ethnicity in Science Fiction” in James and Mendlesohn, *Cambridge Companion*, pp. 253 – 263.

⁹⁴⁴ A novel by M.P. Shiel, *Yellow Danger* (1899); Philip K Dick’s allohistory *The Man in the High Castle* (1962) takes place on a US western seaboard dominated by the Japanese, victorious with the Germans in World War II, and Neal Stephenson’s *The Diamond Age* (1995) is set in a future world dominated by Far Eastern culture. Edward James in Chapter 3, “Yellow, Black, Metal and Tentacled” in Philip John Davies, ed., *Science Fiction, Social Conflict and War*, examines the question of race and the ‘other’ as presented in American SF, pp. 26 – 49. Also in Rieder, *Colonialism*, pp. 141 – 142.

⁹⁴⁵ Alexei and Cory Panshin, *World Beyond the Hill*, p. 215.

⁹⁴⁶ Csicsery-Ronay, Jr., Chapter 14, “Dis-imagined Communities” in Hollinger and Gordon, eds., *Edging into the Future*, p. 222. He contrasts Verne with Wells, who concentrates more on the smaller social community, such as the effect of Martian invasion on a small English village; Roberts hears the cry of *Allah* in the martians’ *ulla, ulla* call, figuring the aliens as an invading Muslim army; Adam Roberts, *The History of Science Fiction* (London: Palgrave Macmillan, 2005), p. 148.

⁹⁴⁷ Sharon Orbaugh, Chapter 4 “The Genealogy of the Cyborg in Japanese popular culture”, in Wong-Kin Yuen, Gary Westfahl and Amy Kit-sze Chan (eds), *World Weavers: Globalization, Science Fiction, and the Cybernetic Revolution* (Hong Kong: Hong Kong University Press, 2005), p. 62.

⁹⁴⁸ Stableford, *Sociology of Science Fiction*, p. 118.

⁹⁴⁹ Roberts, *Science Fiction*, p. 148.

not the text is hospitable to the ‘otherness’ depends upon the author’s agenda. (Omran blames the figuring of aliens as hostile in Western literature as “the result of capitalism”).⁹⁵⁰

Mahmoud was not opposed to the importation of Western technology, but strongly objected to the importation of Western morals. He berated his fellow Arabs as degenerate, for allowing Americans to develop their oil wells while they wasted their money on palaces and at the gambling tables of Monte Carlo and Las Vegas”,⁹⁵¹ and called for an Arab scientific awakening, and an age of enlightenment and reform.⁹⁵² At all stages of his ‘spiritual journey’, his agenda remained deeply conservative, as well as suspicious of the West: in *Reading the Future*, we find him variously blaming the Freemasons, socialism, crack cocaine and heroin for Egypt’s problems, as well as Israel and America.⁹⁵³ Mahmoud’s fascination with Eastern philosophy and reincarnation may partly account for his views on the direction that Egypt’s foreign relations should take: politically, he viewed an alliance with the Far East as preferable to collaboration with the West. In 1992, he called for a single Arab market modelled on the then-EEC,⁹⁵⁴ proposing a simple exchange of resources: “They need our oil, and we need their technology.”⁹⁵⁵

5.9 Israel

The treatment of the state of Israel in the texts is interesting, as the four Arab-Israeli wars and continuing conflicts between Israel and the Palestinian territories continue to construct the Arab world and Israel as each other’s ‘Other’, with Israel a young state arguably having a strong Utopian narrative of its own, created specifically as a new home for the gathering of one race and religion.

Racial and religious ‘othering’ has been treated by Western Utopian-inflected SF; on Dan Simmons’ *Hyperion*, each race has its own planet, Hebron being the planet of the Jews, and Qom-Riyadh the planet of the Shi’ites, although its Palestinian hero is still homeless in the

⁹⁵⁰ ‘Omran, *Fī al-‘Ilm wa Al-Khayāl al-‘Ilmī*, p. 103.

⁹⁵¹ Mahmoud, *Qir’āt Lil-Mustaqbal*. p. 102.

⁹⁵² Ibid., p. 125.

⁹⁵³ Ibid., p. 31; p. 59; p. 71.

⁹⁵⁴ Ibid., p. 17.

⁹⁵⁵ Riḍwān, *Maḥmūd*, p. 38.

year 2538.⁹⁵⁶ For Jameson, the Utopian concept is itself a “prototype of the settler colony”,⁹⁵⁷ while Joan Gordon finds similarities between SF and the literature of the Holocaust, (although she finds no traces of the Shoah in SF).⁹⁵⁸ It would therefore seem possible that Arab SF writers might seek to translocate the Palestinian struggle to an SF plane.

Farouk has published a number of articles on his website about political events in North Africa and the Middle East. His output includes an article unambiguously entitled “Israel the Enemy” (إسرائيل العدو),⁹⁵⁹ the opening lines of which are couched in powerful and emotional terms:

I have and I still and I will always believe that Israel is the enemy. It is impossible that it could ever become merely a neighbouring state sharing borders with us. It is really impossible that it could become a friend, not to us [Egypt], nor to any state, or behave in a different way... whatever Israel said or did, it could not be another Arab country, can never expunge the fact of its being a occupier state, a daughter lying on the corpses and torsos of the Palestinians, and on their land, and on their country...

كنت وما زلت، وسأظل أؤمن أبداً، بأن إسرائيل عدو، ومن المستحيل أن تصبح مجرد دولة مجاورة، لها حدود مشتركة معنا، ومن رابع المستحيالات أن تصبح صديقا، لا لنا، ولا لأي دولة عربية أخرى، مهما أو تصرف عكس هذا.. فمهما قالت إسرائيل أو فعلت، لن يمكنها أبداً أن تمحو كونها دولة محتلة، ادعت بنت وجودها على جثث وأشلأ الفلسطينيين، وعلى أرضهم، وفي وطنهم..

Starting from this position, it is not surprising that Farouk figures Israelis as villains in the *Milaff*, although the actual word ‘Israel’ is very rarely used.

⁹⁵⁶ Csicsery-Ronay, Jr., “Dis-imagined Communities” in Hollinger and Gordon, eds., *Edging into the Future*, p. 224.

⁹⁵⁷ Jameson, *Archaeologies*, p. 205.

⁹⁵⁸ Joan Gordon, “Utopia, Genocide and the Other” in Hollinger and Gordon, eds., *Edging into the Future*, p. 207.

⁹⁵⁹ <http://nabilfarouk.com/%D9%85%D9%82%D8%A7%D9%84%D8%A7%D8%AA/3091-%D8%A5%D8%B3%D8%B1%D8%A7%D8%A6%D9%8A%D9%84-%D8%A7%D9%84%D8%B9%D8%AF%D9%88.html> – accessed 29.2.16.

Allohistories where Israel does not exist are welcomed by the team; in No. 42 *Al-Arḍ Al-Thāniya* (The Other World), in which the team travel to a parallel universe where the Germans won World War II, they are pleased to learn there is no state of Israel. When Nūr asks the otherworld German Hans if he has ever heard of Israel, Hans replies that he has not, adding that Palestine was never occupied. The team realise that, for Hans, the Arab-Israeli wars never happened (and, as we have seen, blames Balfour).⁹⁶⁰

Others in the series take a more explicitly anti-Israeli tone. In No. 30 *Al-Nār Al-Bārīda* (The Cold Fire), what appears to be the partial remains of a nuclear scientist are found, and his apparent death is attributed to the phenomenon of spontaneous combustion (الاحتراق الذائبي), but it transpires that the scientist has actually been kidnapped by the Israelis for his research.⁹⁶¹ (Israel is not named, but the villains' names are Stein Goldman and David Ben Zein). The story ends with the team attempting to stop a helicopter carrying the scientist leaving the roof of the Israeli embassy in Cairo, which enjoys diplomatic immunity, and the scientist is only retrieved when Nūr manages to force the helicopter down into a neighbouring street. Surprisingly, this turns out to be a bad career move for Nūr, and the novel ends with the furious Intelligence Chief transferring Nūr to the Space Police. Nūr's friend Dr Hijazi laments this as a political decision, a clear criticism by Farouk of the Egyptian government's recognition and perceived appeasement of Israel.⁹⁶²

In No. 34 *Waḥsh Al-Muḥīṭ* (Sea Monster), the monster is revealed to be firstly an Atlantean, then an Israeli, submarine. When captured, Nūr wakes up to find himself inside the submarine, in a room with men wearing German uniforms from World War II. He learns that the monster is called the *Damar*, the destroyer, and that its masters are not Atlantean, but Israeli. Again, Israel is not named – this is all the work of a 'hostile state' (دولة المعادية لنا),⁹⁶³ but the 'Atlantean' prince is revealed to be 'General Shalon' (an obvious reference to Ariel Sharon), and his aim is to disrupt the peaceful military co-operation between Egypt and India, which is a clear attempt by Farouk to figure Israel as opposed to Egypt's imaginary futuristic orientation towards a resurgent East (rather than its current status as a military client state of

⁹⁶⁰ Farouk, No. 42 *Al-Arḍ Al-Thāniya* (The Other World), pp. 37 – 38.

⁹⁶¹ A real Egyptian physicist, 'Alī Muṣṭafa Maṣharīfa, mentioned in No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) died in mysterious circumstances in 1950; he was rumoured to be the victim of a Mossad assassination because of his scientific prowess.

⁹⁶² Farouk, No. 30 *Al-Nār Al-Bārīda* (The Cold Fire), p. 97.

⁹⁶³ Ibid., p. 80.

the USA). The book ends with Salwa telling Nashwa that General Shalon was “the real monster”.⁹⁶⁴

Neither is Israel named in No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), whose villain is named as Eric Friedmann, a “dangerous spy from an enemy nation”.⁹⁶⁵ In No. 84 *Kanz Al-Faḍā'* (Space Treasure), the American intelligence chief summons an agent, Murphy, to send him on a mission to recover the information-cubes containing all of world culture (kept in this form during the alien Occupation), but when Murphy tells him that the future of America is not motivation enough, the chief is angry and wonders if it is due to his upbringing, his nature, or his Jewish roots (“جذوره اليهودية”).⁹⁶⁶

However, in No. 86 *Al-Imbirātūr* (The Emperor), the US president summons his intelligence chief and berates him for choosing Murphy for the mission to recover the space treasure. He worries that Murphy, who is of German origin, will try to impose German rule again, but the chief reminds him that Jews will not support the Germans. It is of particular interest that at this point there is a footnote⁹⁶⁷ that describes the Germans' killing of the Jews in the death camps (“Adolf Hitler killed a large number of them”), and the compensation paid, so, while the characters do criticise Israel (albeit indirectly), total holocaust denial is not on the agenda.

The anti-Israeli theme is perhaps made most uncomfortably explicit in No. 39 *Al-Thulūj Al-Sākhina* (Hot Ice). When Egypt's Arctic research post on Greenland, Ice Station 1, disappears, the team investigate. They are greeted by the mysterious Professor Zero, who styles himself ‘lord of the ice’, but find out that his real name is Hans Stein, and that he is presiding over a huge frozen Nazi army, the result of a German research project created in World War II because of the difficulties caused by ice in the Russian campaign. Goering began to build this hall after fleeing following the fall of Berlin in 1944. Zero's plan is for the Führer to lead them again, and Nūr asks if he will raise the dead; in answer, Zero shows him Hitler frozen inside an ice block.

⁹⁶⁴ Farouk, No. 34 *Waḥsh Al-Muḥīt* (Sea Monster), p. 112 (“وحش المحيط الحقيقي”).

⁹⁶⁵ Farouk, No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), pp. 18 – 19.

⁹⁶⁶ Farouk, No. 84 *Kanz Al-Faḍā'* (Space Treasure), p. 126.

⁹⁶⁷ Farouk, No. 86 *Al-Imbirātūr* (The Emperor), p. 39.

Impressed by Nūr's genius, like all the *Milaff* villains, Zero asks if he has any German blood, giving Nūr the chance to proudly assert his Arab identity: "Every drop of my blood bears an Arab pulse, Zero...I am a scion of that civilisation that lit up the whole world...".⁹⁶⁸

بل كل قطرة في دمي تحمل النبض العربى يا (زيرو)...إننى سليل تلك الحضارة , التى أضاعت العالم كله

The team's pathologist Dr Hijazi adds, untruthfully, that the Arabs became the greatest civilisation in history by not shedding one drop of the blood of any woman, child or old man:⁹⁶⁹

لقد أقام العرب أعظم حضارة فى التاريخ, دون أن يريقوا قطرة واحدة من دم امرأة أو طفل أو شيخ

As the Nazi army defrosts, Nūr uses his friend Dr Hijazi's German language skills to tell them that Hans Stein is not a real Nazi, but one of the "people who wore the Star of David" ("ذلك الخنس الذى يتخذ (نخمة داوچ)", that he had lured Hitler to this place to kill him using an ice tomb as revenge for the deaths of his people, and that he further planned to use the German army to build his own (Israeli) homeland ("وطن قومى").⁹⁷⁰ The Nazi army then rejects Stein, and salutes Nūr as its new commander.

Nūr tells Stein that he realised his true identity when he realised that his translation machine was translating from Hebrew, a language which, he says, was not widespread before the 'battle of Palestine', having been developed because Stein's people had to make a new language for all those coming from different countries:⁹⁷¹

فاللغة العبرية لم تنتشر إلا بعد معركة فلسطين , عندما قرّر بنو جنسك إيجاد لغة جديدة تجمع بين الجميع , خاصة و أنهم مهاجرون من دول تتحدث بالغات مختلفة ...

Farouk adds an asterisk and footnote here marking this as 'historical truth' (⁹⁷² حقيقة تاريخية). The story ends with Stein encased in ice beside the frozen Hitler. Farouk frees Nūr from the embarrassment of having a Nazi army under his control by having them conveniently blow

⁹⁶⁸ Farouk, No. 39 *Al-Thulūj Al-Sākhina* (Hot Ice), p. 48.

⁹⁶⁹ Ibid., p. 73.

⁹⁷⁰ Ibid., p. 85.

⁹⁷¹ Ibid., p. 93.

⁹⁷² Ibid., p. 93.

themselves up when they realise that Hitler cannot be revived. This is the most overtly anti-Israeli and anti-Jewish book in the series, making clear the author's views on Arab superiority, the perceived artificiality of Hebrew as a modern language, and presenting a Jewish character as a Nazi collaborator.

At the end of No. 80 *Al-Naṣr* (Victory), the final book in the *Occupation* quartet, when the team defeat the alien Jalūrīālans who are trying to occupy Earth, Nashwa takes a bomb into space on a suicide mission to save the earth. The morality of suicidal quasi-military action is discussed in No. 83 *‘Arḍ Al-‘Ādam* (The Non-Existent World), when the Atlantean robot and team ally S-18 becomes the ultimate suicide bomber as he voluntarily combusts himself to release proton energy to counter the enemy's gamma rays, returning the earth and its inhabitants to their normal state. Prior to the explosion, Nūr explains the situation to S-18 “as he would to a friend” and S-18 listens, responding yet again that he is at Nūr's service, before flying into the upper atmosphere to detonate. The team discuss the morality of S-18's action at the end; he has saved their lives, but the pathos of suicide is muted by the fact that he is only a robot, ultimately lacking humanity despite the infrequent flashes of understanding granted to him by the author.⁹⁷³

Farouk creates further explicit parallels of the Arab-Israeli conflict in No. 96 *Budhūr Al-Sharr* (Seeds of Evil), when Salwa and the space team suddenly see that their spaceship has been joined by a huge ship – making theirs look “like a football beside a tank” - a visual image strongly reminiscent of Israeli manoeuvres in the Palestinian territories.⁹⁷⁴ Similarly, at the end of No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet), a child playing on the beach at Alexandria finds a small spaceship piloted by the miniature race that colonised the man-made model Earth, but is unaware that there is “a tiny, desperate person inside it, crying and looking for a new homeland”.⁹⁷⁵

5.9.1 Other enemies

Sometimes the villains are not Israeli. Occasionally, they are American (no doubt as a response to US support for Israel) or simply generalised as ‘foreign powers’. In No. 2 *Ikhtifā'*

⁹⁷³ Farouk, No. 83 *Arḍ Al-‘Ādam* (Non-Existent World), pp. 134 – 138.

⁹⁷⁴ Farouk, No. 96 *Budhūr Al-Sharr* (Seeds of Evil), p. 109.

⁹⁷⁵ Farouk, No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet), p. 118.

Ṣārūkh (Vanishing Rocket No. 2), Salwa asks why the Space Command centre does not use satellites, and Nūr tells her that this is in order to protect its security, as ‘foreign powers’ are always seeking to spy on Egypt’s scientific secrets.⁹⁷⁶ We are told that the villains’ names are Simon and John, and that they aim to steal the amino acid fuel and send a sample to their home country, which they say is a ‘superpower’ (“دولتنا العظمى”).⁹⁷⁷ Simon and John joke with each other that their country’s intelligence agency is the best in the world, and that an Egyptian cannot outwit them. Farouk does not name the enemy country, although the names suggest the UK or USA; the same ruse is employed in No. 6 *Zā’ir min Al-Mustaqbal* (Visitor from the Future), when the villains are named Steve, Roger and James.⁹⁷⁸

No. 48 *Sijn Al-Qamr* (Moon Prison) features a scowling, vodka-swilling Russian, Vassiliev, although when Ramzy says that he hates all Russians, Nūr rebukes him, telling him that the Russians are “a great people”.⁹⁷⁹ Nazis are definitely villains, although Farouk makes his Israelis wear Nazi uniforms in No. 34 *Waḥsh Al-Muḥīt* (Sea Monster), and makes Hans Stein (Professor Zero) in No. 39 *Al-Thulūj Al-Sākhina* (Hot Ice) command a Nazi army, presumably in order to draw a parallel between the Nazi treatment of the Jews and the Israelis’ treatment of the Palestinians.

The British are presented favourably in No. 86 *Al-Imbirātūr* (The Emperor) because they speak up for Egypt. In No. 92 *Al-Riḥlat Al-Rahība* (The Terrible Voyage), the British agent James Bradley is described as ‘handsome and debonair’ throughout – “وسيم وعنيق”, and “very polite”⁹⁸⁰, a stereotypical James Bond character whose mission is to steal Egyptian scientific secrets. The colonial situation has been reversed in the *Milaff* world; the British admire Egyptian dignity (“كرامة”) and recognise Egypt as a world leader, but are still presented as devious spies, envious of Egyptian technological prowess.

The selection of texts under examination here are otherwise almost silent on the subject of Israel or Zionism.⁹⁸¹ In Towfik’s *Ūtūbiyā* (Utopia), the elite of the futuristic Egypt no longer

⁹⁷⁶ Farouk, No. 2 *Ikhtifā’ Ṣārūkh* (Vanishing Rocket), p. 31.

⁹⁷⁷ Ibid., p. 42.

⁹⁷⁸ Farouk, No. 6 *Zā’ir min Al-Mustaqbal* (Visitor from the Future), p. 58.

⁹⁷⁹ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison), p. 35.

⁹⁸⁰ Farouk, No. 92 *Al-Riḥlat Al-Rahība* (The Terrible Voyage), p. 134.

⁹⁸¹ Sharuni says that Sherīf’s short story ‘But the Locusts Have Disappeared’ is about scientists using science to control others; an attack scene is an allegory of the Israeli attack (‘Zionist invasion’) on Arab land: Yusuf Al-Sharuni. *Al-Khayāl al-’Ilmi fī Al-Adab Al-’Arabī Al-Mu’āsir* (Cairo: General Egyptian Book Organisation, 2000), p. 26; p. 163.

feel enmity for Israel; the anti-hero employs an Israeli doctor to maintain his fashionable cosmetic wound. Both lost close relatives in the 1973 war, and the Israeli doctor models the wound on the one his father received, but the anti-hero does not know or care about the war.⁹⁸² Later, the hero Gaber asks the Utopian if there are Israelis living in Utopia; when he learns that there are, he comments that the poor still regard Israel as an enemy.⁹⁸³

Mahmoud's known position on the Israeli question was politically anti-Zionist, but religiously tolerant and moderate. Although he expressed hope that the Israeli state would have fallen by 2000, taking inspiration from the swift fall of communism in Eastern Europe, he drew a distinction between anti-Zionism and mere hatred of Jews, expressing the hope that Jews would continue to live in Haifa, but not as part of an Israeli state.⁹⁸⁴ He was consistent in rejecting Israel's right to land, but his apparent sympathy towards the Jewish religion, and publication of articles and books explaining the Torah, caused him to be blacklisted from further publishing in *Al-Ahrām*, according to his son Adham.⁹⁸⁵ The Israeli question does not feature in his three SF works, although we see the Brahma in *Al-Khurūj min al-tābūt* (Rising from the Coffin), a pantheistic and syncretistic character, uttering Jewish (as well as Muslim and Buddhist) prayers, a scene that reinforces the impression of Mahmoud's longing for greater religious harmony.⁹⁸⁶

5.10 Gender

Western SF has not traditionally been known for the subtlety and realism of its gender relations.⁹⁸⁷ In the early texts, and especially in the cover art of the pulps, women were somewhat crudely represented as bathykolpic princesses in need of rescue, in order to entice

⁹⁸² Towfik, *Ūtūbiyā* (Utopia), p. 12; English version, p. 6.

⁹⁸³ Ibid., p. 82. This is not true; the narrator shows awareness of McCarthyism, Roman history and the French revolution in the first two chapters, as he tells that he reads a lot (p. 13).

⁹⁸⁴ Mahmoud, *Qir'āt Lil-Mustaqbal* (Reading the Future), p. 24.

⁹⁸⁵ Obituary in *Al-Ahrām* <http://weekly.ahram.org.eg/2009/971/eg12.htm>, accessed 29.2.16.

⁹⁸⁶ Mahmoud, *Al-Khurūj min al-tābūt* (Rising from the Coffin) p. 29. The Brahma Wagisoara prays from the Bible, the Qur'ān, the Talmud and the Buddhist Dhammapada.

⁹⁸⁷ The genre may even be 'Orientalist' in its treatment of gender: Said found that in Western literature about the Arab world, "women are usually the creatures of a male power-fantasy". Edward Said, *Orientalism* (Reprinted with a new Preface) (London: Penguin, 2003), p. 207.

For an introductory overview of gender as presented in Western SF, see Veronica Hollinger, Chapter 8 "Feminist Theory and Science Fiction", pp. 125 – 136, and Helen Merrick, Chapter 18 "Gender in Science Fiction", pp. 241 – 253, in James and Mendlesohn, *Cambridge Companion*.

their largely adolescent male readership, for whom authors produced technocratic, militaristic texts scattered with simple sexual stereotypes.⁹⁸⁸

Kingsley Amis bemoaned the utter lack of sexual interest in Verne, whose novels were dominated by male technocratic heroes;⁹⁸⁹ Suvin observes that there are no women, but also no working class men, in Verne,⁹⁹⁰ which suggests that the lack of women is simply a feature of the particular class profile of the author's milieu, that of the scientific gentleman.

Other SF literature followed social reality of its production milieu. While women experienced social pressure to return to the home after the Second World War, women in the USSR were encouraged to work,⁹⁹¹ and Griffiths' study of Russian SF found a greater equality that he suggested followed this zeitgeist,⁹⁹² while Matthew's on Japanese SF found a separation in the treatment of marriage and sex that reflected contemporary Japanese society's compartmentalisation of each.⁹⁹³

The position of women as legally and socially subaltern actors presented an opportunity to authors of speculative fiction to create alternatives; Jacqueline Pearson finds a correlation between the subaltern statuses of women and SF, what Suvin calls a 'non-hegemonic' literature,⁹⁹⁴ while Marion Zimmer Bradley considered women's liberation a much greater challenge than space exploration.⁹⁹⁵

Many Arab novels, in particular *Bildungsromane* such as Tayīb Ṣāleḥ's *Season of Migration to the North*, depict the west as a sexual playground, an erotic arena at a safe distance from the conservatism of home, where the protagonist could undertake a voyage of sexual

⁹⁸⁸ Merrick finds Heinlein's women often depicted as morally superior, but sexually dependent: Helen Merrick, Chapter 18 "Gender and Science Fiction", James and Mendlesohn, *Cambridge Companion*, p. 245.

⁹⁸⁹ Amis, *New Maps of Hell*, p. 37.

⁹⁹⁰ Suvin, *Metamorphoses*, pp. 155 - 156.

⁹⁹¹ This resulted in the 1958 National Defense Education Act, which encouraged both boys and girls to study science. Lisa Yaszek, "Not Lost in Space – Revising the Politics of Cold War Womanhood in Judith Meril's science fiction", in Donald M. Hassler and Clyde Wilcox (eds.), *New Boundaries in Political Science Fiction* (Columbia: University of South Carolina Press, 2008), pp. 79 - 80. Farah Mendlesohn also points to the American pro-science educational reforms of the 1950s as a response to Russia's launch of the sputnik. Mendlesohn, Chapter 20, "Religion and Science Fiction", in James and Mendlesohn, *Cambridge Companion*, p. 264.

⁹⁹² Griffiths, *Three Tomorrows*, p. 172.

⁹⁹³ Matthew, *Japanese Science Fiction*, p. 110.

⁹⁹⁴ Jacqueline Pearson, Chapter 2, "Where No Man Has Gone Before: Sexual Politics and Women's Science Fiction", in Davies, ed. *Science Fiction, Social Conflict and War*, p. 8.

⁹⁹⁵ Roberts, *History of Science Fiction*, p. 75.

discovery or disillusionment without fear of judgment or consequences from his peers or elders.⁹⁹⁶ This is a neat literary reversal of Flaubert's written experience of the Orient as his sexual playground,⁹⁹⁷ and perhaps communicates no more than an exoticised and over-eroticised fascination with a different culture and practises of the 'other'.

In SF, the lack of sexuality bemoaned by Kingsley Amis in the mid-twentieth century Western genre is understandably also a feature of the *Milaff*, which were written for children or young teenagers, and the *tempora et mores* of both writer and milieu in Mahmoud's SF triffecta is also reflected in the roles of his female characters. In *Rajul taht al-Şifr* (Man Below Zero) Dr Shāhīn's wife Rosita talks only of love and morals; no other aspects of her character are explored, as they are not relevant to the plot, which requires her to demand love and marriage from Shāhīn, facilitate 'Abd Al-Karīm's plot, and be presented at the end as a helpless victim of her husband's ruthless scientism and advocate for belief in God.

From her first appearance at Shāhīn's lecture (at the end of which she proposes to him), she asks frequently about the importance of the 'love particle' or 'love atom' ("ذرة حب"), telling him recklessly that the whole universe can go to hell, as long as the love atom exists in our hearts.⁹⁹⁸ ... فليذب الكون إلى الجحيم ما دامت في قلوبنا ذرة حب... Despite laughter among the audience, she tells him that it is the only atom from which the universe is made⁹⁹⁹ (possibly a nod from the well-read Mahmoud to the last words of Dante's *Paradiso*, "the love that moves the sun and other stars"). Rosita and Shāhīn's marriage roles are traditionally gender-complementarian; when Shāhīn's assistant 'Abd Al-Karīm, who is in love with Rosita, propositions her, and asks her to consider having two husbands (which, we are told, is permitted in this brave new world), Rosita is horrified, telling him that women do not give their hearts and bodies like this to two men, and if society continues in this way, women and the family will be destroyed: we are still symbols of love, faithfulness and motherhood:¹⁰⁰⁰ ما زلنا رمزاً للحب و الوفاء و الأمومة.

Rosita is the embodiment of the emotional argument against the farther reaches of scientific alteration of the world, and for home and family as core values. While her opposition to the

⁹⁹⁶ El-Enany, *Arab Representations*, p. 208; El-Enany notes the general dominance of sexual themes in mainstream Arabic literature, pp. 54 - 55.

⁹⁹⁷ Said, *Orientalism*, p. 195.

⁹⁹⁸ Mahmoud, *Rajul taht al-Şifr* (Man Below Zero), p. 23.

⁹⁹⁹ Ibid., p. 24.

¹⁰⁰⁰ Ibid., p. 43.

plan of her husband and father of her unborn child to transform irrevocably into waves is understandable, her arguments do not only champion the hearth, they are presented as anti-intellectual:

I can't hug waves...I don't understand these symbols and algebraic codes...I want reality I can touch...I want your flesh and blood and warmth and pulse and presence filling my hearing, sight and senses.¹⁰⁰¹

..لن أستطيع أن أحتضن الأمواج...لا لفهم في هذه الرموز و الشفرات الجبرية...أنا أريد واقعاً المسه.
أريدك لحماً و دماً و دفناً و نبضاً و وجوداً ملء السمع و البصر و الحواس.

Her speech provokes only puzzlement and a rather Professor Higgins-like response, as Shāhīn asks her why she can't be more like a man, and why she can't think of anything but the body, forgetting the mind?:¹⁰⁰² لماذا لا تعترفين إلى بالجسم و تنسين العقل...

At the end of the novel, Rosita's negative view of science is even more entrenched; she wonders why men are interested in planets and stars, declaring her hatred of machines, the smoke that hides the face of the sun, test tubes and pipes and weather controls, as well as those inventions that know how to make a heart but cannot link it with the spirit ("الصانع العظيم")¹⁰⁰³, and why Shāhīn did not understand that love was stronger than magnetism. The clear division between the spiritual *rūh* and the corporeal *qalb* speaks clearly of Mahmoud's thoroughly Cartesian world-view, as well as underlining Rosita's privileging of spirit over science. Bodilessness for Shāhīn is a desideratum, something that can be achieved, in the context of the novel, by futuristic science (although his wife Rosita, the 'virtuous' character' deems it selfish and wrong). For Shāhīn, the body appears to be a problem to be overcome, as it is for Nādir, the hero of *At-Tūfān Al-Azraq* (The Blue Flood), although for the ascetic Shāhīn, the answer is incorporeality, whereas for Nādir, redemption is achieved through sexual expression.¹⁰⁰⁴

¹⁰⁰¹ Ibid., pp. 58 – 59.

¹⁰⁰² Ibid., p. 59.

¹⁰⁰³ Ibid., p. 103.

¹⁰⁰⁴ Azzām finds the deathless aliens of the 'phosphorus' planet in *Khalf Hijāz Al-Zaman* (Behind the Barrier of Time) to choose incorporeality and become floating emanations if they wished to escape from their daily life. 'Azzām, *Al-Khayāl al-'Ilmī*, p. 88.

Even when admitting to ‘Abd Al-Karīm that she knows Shāhīn does not love her as much as he loves scientific truth, she tells him that he doesn’t understand that love is still a primitive feeling without logic (“الحب ما زال هو الشعور البدائي الباقي بلا منطق...”),¹⁰⁰⁵ words fatally echoed by ‘Abd Al-Karīm when he decides to betray her by giving Shāhīn the means to release himself from prison and carry out his plan to disembodily himself, adding to the notion of the ‘primitive’ (“البدائي”) those of wildness and savagery (“وحشيتها و همجيتها”).¹⁰⁰⁶ The book ends with Rosita grieving for Shāhīn, and the only person in the world who still believes in God.

In Riḍwān’s biography of Mahmoud, he says that women were important in his life, but that he never allowed his passions to overcome his reason, and that he believed that women’s highest calling was home and children.¹⁰⁰⁷ Like the conservative social commentator Galal Amin, he criticised the concept of human rights as understood by the West, particularly with regard to the Beijing declaration¹⁰⁰⁸ on women’s rights, saying it was a return to the *Jāhiliyya*, the Age of Ignorance.¹⁰⁰⁹ The scientists whose achievements are discussed in Shāhīn’s lecture are both male and female - Fairouza discovers the ruins of Atlantis, and he also mentions the Indonesian Timawa who split the neutron,¹⁰¹⁰ as well as the Hungarian doctor Agina who pioneers test tube babies¹⁰¹¹ - but the only female character with a speaking role exemplifies very traditional female values and preoccupations.

Accents of misogyny or crude stereotyping appear occasionally throughout the book; during Shāhīn’s lecture, when he describe the revivifying effects on nervous conditions of a period of extreme cold, he makes his audience laugh by saying how the treatment made a man forget the “betrayal and deception of his beloved” (“و قد نسى ما حدث من خيانة حبيبته و خداعها”).¹⁰¹² He also tells them that Fairouza, the Iraqi researcher who discovered the ruins of Atlantis, finding that they knew about electricity and atomic power, found that they “knew about rouge also” (“و تقول الدكتورة أنهم عرفوا rouge أيضاً”); this is immediately followed by anecdote about the

¹⁰⁰⁵ Ibid., p. 67.

¹⁰⁰⁶ Ibid., p. 69.

¹⁰⁰⁷ Riḍwān, *Maḥmūd*, pp. 12 - 14.

¹⁰⁰⁸ Galal Amin, *The Illusion of Progress in the Arab World* (Cairo and New York: The American University in Cairo Press, 2006), p. 56 and p. 65.

¹⁰⁰⁹ Riḍwān, *Maḥmūd*, p. 58.

¹⁰¹⁰ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero), p. 19.

¹⁰¹¹ Ibid., p. 24.

¹⁰¹² Ibid., p. 18.

discovery of a slate from Atlantis with a cartoon mother-in-law drawn on it, provoking laughter from his audience.¹⁰¹³

Sex is treated gently but frankly in a more adult context in *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field), as part of Homo's internal monologue on his daily routine. His wife comes home from work, makes him a cup of tea, and they make love until it is time to watch state television programmes.¹⁰¹⁴ When searching for her husband using her personal surveillance device by accessing the internal camera in his friend David's flat, Homo's wife Layla sees David running naked on an exercise machine, but this is not presented as shocking or unusual.¹⁰¹⁵ The Free Love Salons are introduced during the first quarter, and the regime as deliberately guiding its citizens towards this activity,¹⁰¹⁶ with Homo recalling that Layla actually encouraged him to go to them:

...Go to the Free Love Salon some time...everyone does this, because they know that a successful sexual encounter unites this feeling of division, and makes a person feel a sense of belonging to the real world, giving him a feeling of power. You know that the girls in the Free Love Salons are young, very charming, and trained in the various acts of love...¹⁰¹⁷

اذهب الى صالون الحب الحر لبعض الوقت...كلهم يفعلون ذلك, لأنهم يعلمون أن اللقاء الجنسي الناجح
يستطيع أن يوحد الذات المنقسمة...و أن يعيد للانسان احساساً بالانتماء للواقع, و احساساً بالقوة...و
أنت تعلم أن فتيات صالونات الحب الحر, صغيرات السن و فائنات حقاً, و مدربات على أفعل الحب
المختلفة...

When Homo is reflecting with pleasure on his partnership upon meeting Layla after his release from interrogation, he recalls that the matchmaking computers' choice was good, that although they have different sexual drives, their life together is happy; he likes reading, she does not, but they both enjoy culinary history and old-fashioned drinks.¹⁰¹⁸ When Layla is driving him home in the air-car, she meditates on the purpose of sex:

¹⁰¹³ Ibid, pp. 21 – 22.

¹⁰¹⁴ Mūsa, *Al-Sayyid*, p. 11.

¹⁰¹⁵ Ibid., p. 18.

¹⁰¹⁶ Ibid., p. 58.

¹⁰¹⁷ Ibid., p. 94.

¹⁰¹⁸ Ibid., p. 90.

She was convinced from her instinct, supported by information, that the sex act had a particular place of importance for human beings, as they had particular reactions to it. All of the studies conducted in the old world had shown that man was the only species in which the female achieved sexual orgasm, just as he was the only species in which the male and the female made love face to face....¹⁰¹⁹

كانت واثقة من اعتقادها الغريزي المدعم بالمعلومات أن للفعل الجنس مكانة مميزة خاصة جدا بنسبة للبشر, كما أن له ردود فعل حيوية خاصة... فلقد أثبتت كل الدراسات التي أجريت في العالم القديم أن الإنسان هو النوع الوحيد الذي تحصل فيه الأنثى على النشوة الجنسية, كما انه النوع الوحيد الذي يحدث فيه الاتصال الجنسي بين الذكر و الأنثى وجها لوجه ...

She goes on to tell herself that sex is a biological performance, honed over millions of years, and that only humans could love, until the regime began to breed human beings in factories.

Partnerships are not intended to be sexually exclusive; while Homo is being interrogated, Layla casually invites his friend David into their home for sex. David tells her that he had sex the night before in the Free Love Salon, and that he was tired, but if she desired it, he would. She asks him if her husband ever went to the Salons, and he tells her that he never does. We find out that previously Layla had been angry when Homo had encouraged her to go to the Salons, and not be tied down by 'ancient views'.¹⁰²⁰

Homo is genuinely unaffected when Layla tells him that she slept with David,¹⁰²¹ but the apparent indifference between the spouses on this matter is sown with ambiguity later in the novel; when they are discussing how men used to kill over food and religion and for power, Layla laughingly suggests that they also killed for jealousy, but David replies sarcastically that most died because of torture or terrorism, or in wars.¹⁰²² Near the end, when Homo is about to join the Exit, leaving David and Layla behind, Layla is troubled by the regime's intention to abolish marriage, suggesting that she does place some value on at least notional exclusivity, if not traditional marriage.¹⁰²³

¹⁰¹⁹ Ibid., pp. 102 - 103.

¹⁰²⁰ Ibid., pp. 67 - 70.

¹⁰²¹ Ibid., pp. 92 - 93.

¹⁰²² Ibid., p. 129.

¹⁰²³ Ibid., p. 162.

During the Hanging Hall debate, the regime declares its opposition to the (traditional, nuclear) family as an instrument of bondage:-

“...it was the stage of individual ownership that caused the systems of government to start to appear, from the most dangerous social regime in human history...the regime of bondage...the regime of the family, where a man, not a woman, is the head of the family and head of the tribe and head of the state...and head of all social systems.”

The woman was a leader in the first communist societies in the ages of hunters, and with the appearance of individual ownership, the sovereignty of man was transferred, and woman also were obliged to specialise in this...while they kept to themselves the right to procreate!¹⁰²⁴

كانت مرحلة الملكية الفردية بداية لظهور نظامين من أخطر النظم الاجتماعية فى تاريخ الانسان...نظام الرق...ونظام الأسرة, حيث كان الرجل لا المرأة, هو رأس الأسرة ورأس القبيلة ورأس الدولة, ورأس كل تنظيم اجتماعى...

لقد كانت المرأة هى الحاكمة فى المجتمعات الشيوعية الأولى فى عصور الصيد... و بظهور الملكية الفردية انتقلب السيادة الرجل, فامتلك المرأة و فرض عليها التخصص له...بينما احتفظ لنفسه بحق التعدد...!

The rebel Barūf responds by reminding the audience on the dangers of the regime's co-optation of sexual appetite in furtherance of its aims:

...one visit, my lords, to the Salons of Free Love is enough to discover for ourselves that we are passionate beings that are never satisfied, and women change towards us after we have performed the act of natural procreation.

That ancient sexual adventurer, the Marquis de Sade, was an intelligent and deep observer...he used to say that there was no sexual distinction between satisfaction and ennui, and that both lead in turn to the search for ways of sexual excitement

¹⁰²⁴ Ibid, p. 155.

that are more violent and extreme, and we can now understand, how the pioneers of the Free Love Salons that encouraged the regime and became widespread in their establishments, to animal sexuality...¹⁰²⁵

و زيارة واحدة أيها السادة الصالونات الحب الحر كافية كي تكشف لنا عن هذا الكائن الشهواني الذي لا يرتوى أبدا، و الذي توحدت اليه المرأة بعد حرمانها من عملية الانجاب الطبيعية ...
لقد كانت للباحث الجنسي القديم، المركز دى صا، ملاحظة ذكية و عميقة ... كان يقول أن اللا تمييز
الجنسى يؤدى الى الشيع و السأم اللذين يؤديان بدورهما الى البحث عن وسائل جنسية للثارة، أكثر عنفا
و تطرفا ... و يمكننا أن نفهم الآن، كيف تحول رواد صالونات الحب الحر التي يشجعها النظام و يتوسع فى
انشائها، الى وحوش جنسية ...

This type of gentle, playful relationship between a married couple is replicated in a more traditional format in al-Quwārī's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born). The diary is full of affection and muted exasperation as the narrator and his wife argue over trivia. Their sexual life is alluded to twice, once when the narrator is reading a book and tells his wife that it says that one reason for divorce is sexual boredom (“الملل الجنسي”).¹⁰²⁶ His wife blames the traditional marriages of old for the divorce rate; the scene ends with her laughingly turning the light off. Later, he suggests that they go to a forest for a picnic and sex under cover of the woods.¹⁰²⁷ When they talk of the former segregation of the sexes with sadness, he comments that there are no differences now between girls and boys, and no barriers between them, whereas in past there were “a thousand walls between the sexes” (“ألف حائط بين لقاء الجنسين”).¹⁰²⁸

Gender segregation is presented as a quaint relic; when the narrator visits his friend Wagdy, who owns a store of antiquarian books going as far back as 1964, he marvels at the arguments over the emancipation of women, in particular noting Qasim Amin's *Tahrīr al-Mar'a* (The Liberation of Woman) “from the milieu of ignorance, backwardness and incomprehension” (“فى الظروف الجهل و التخلف و الانغلاق”).¹⁰²⁹ Women's liberation was achieved with difficulty, he says, although he jokes that no man with a harem could be considered to be free.¹⁰³⁰

¹⁰²⁵ Ibid., p. 170.

¹⁰²⁶ Al-Quwārī, *Min mufakkirah*, p. 58.

¹⁰²⁷ Ibid., p. 84.

¹⁰²⁸ Ibid., p. 65.

¹⁰²⁹ Ibid., p. 24.

¹⁰³⁰ Ibid., pp. 104 - 105. ‘Azzām finds evidence in Western proto-Utopias of Cabet and Fourier for a Utopian liberation of women by giving women freedom to work: ‘Azzām, *Al-Khayāl al-‘Ilmī*, pp. 30 – 31.

He and his wife laugh at the old tradition of female self-adornment with gold;¹⁰³¹ he says that she is a cultured woman with many interests, a diploma in interior decoration, a knowledge of car mechanics, and a love of reading history,¹⁰³² although he uses her education to pick a quarrel with her in another entry, complaining that she does not chatter idly as he would like, and talks only of history and government, and the development of furnishings.¹⁰³³

Although the main theme of *At-Tūfān Al-Azraq* (The Blue Flood) is the danger presented by all-knowing computers, a major sub-theme is the sexual frustration of the hero, the famous young anthropologist and author of the best-seller *The Age of Man*, Dr ‘Aly Nādir. His love interest, his Pakistani student Tāj Maḥī Ad-dīn, is presented early in the narrative, “her dark face blooming with beauty”:¹⁰³⁴ “زاد وجهها الخمرى الجميل نضرة وجمالاً”.

Tāj is in love with him, and her father asks Dr Nādir to come to Fiji to lecture to the Fiji Anthropological Society, an exotic location that features in his frequent dreams about Tāj. His sexual interest in Tāj is linked to her status and appearance as what he frequently characterises as an ‘Eastern’ woman; Tāj chides him when he reprimands her too sharply: “There speaks the Eastern man!”¹⁰³⁵

Walls and imprisonment are a recurring symbolic theme, reflecting Nādir’s struggle with his sexuality and with the constraints of traditional religion: the police inspector observes from reading Nādir’s diary that there is a “psychological wall that he cannot surmount or pierce”,¹⁰³⁶ and Nādir himself recognises another “wall” in the sheikh’s and the sheikh’s son’s thinking when discussing his atheism,¹⁰³⁷ internally dismissing the tribe’s Sufi ecstasies as “the result of the weak human brain crashing against huge walls.”¹⁰³⁸ He finds the desert itself to be a vast prison, but the borders are inside them, and they are too weak to

¹⁰³¹ Ibid., p. 34.

¹⁰³² Ibid., p. 90.

¹⁰³³ Ibid., pp. 121 - 122; his wife retorts that he can buy a record cylinder for that, and that she is not his toy.

¹⁰³⁴ Al-Baqāli, *At-Tūfān Al-Azraq* (The Blue Flood), p. 7.

¹⁰³⁵ Ibid., p. 12: “ها هو الرجل الشرقى يتكلم!”.

¹⁰³⁶ Ibid., p. 34: “جدار سايكولوجي لم يستطع تسلفه أو اختراقه” The inspector is puzzled by the wall, as he goes on to say that Nādir did not believe in sexual or religious barriers (“لا يؤمن بالحواجز بين الأديان والأجناس”), and that in any case Tāj, being Pakistani, was of his faith.

¹⁰³⁷ Ibid., p. 54.

¹⁰³⁸ Ibid., p. 55: “هي الذهول الناتج عن اصطدام العقل البشري الضعيف بالحائط الجبار”.

leave.¹⁰³⁹ Nādir's own famous academic work, *The Age of Man*, mentions suicide as a way for philosophers to leave the prison of the flesh,¹⁰⁴⁰ while his companion Kathy describes the world of Jebel Judi beneath the lake as an "imprisoned world".¹⁰⁴¹ He describes feelings of release from prison, or an iron chest, when he smokes the Neurocide-laced cigarette that SANCTUARY gives him during his suicide-gambit when he entices SANCTUARY to switch itself off.¹⁰⁴²

Presented with a willing sexual partner, the red-headed Scot Anne Cecilia Ward, whom he picks up in the Artists' Coffee Shop in Kensington, he finds himself conflicted and anxious about losing his virginity:

If you succeed now, you will break down those steel walls that have always stood between you, and happiness and love. Your days will pass, and you will end your days without knowing the heat of a woman's body and the warmth of her emotions, bodily passion with a woman and the warmth and emotion, her gentle affection and delight...you will be a virgin like a cold bar of ice without life...¹⁰⁴³

إذا نجحت الآن، فسوف تخترق الجدار الفولاذي الذي طالمان وقف بينك السعادة و الحب...ستذهب أيامك،
و ينتهي عمرك، دون أن تعرف حرارة جسد المرأة و دفء عاطفتها و أنين استسلامها و استمتاعها
...ستذهب بكرةً كلوح ثلج بارد بدون حياة...

He takes refuge in a recurring fantasy where Tāj appears naked on a tropical island,¹⁰⁴⁴ but in the dream he looks down and is horrified to find himself sexless. When the police find his diary detailing his failed encounter and his fantasies about Tāj, they speculate about his sexuality, wondering if he is a "natural bachelor" ("أعزب طبيعي"), but conclude that he suffers from sexual or psychological dysfunction.¹⁰⁴⁵ When Nādir and Tāj are forced to share a tent

¹⁰³⁹ Ibid, p. 34.

¹⁰⁴⁰ Ibid., p. 78 "أسر الندن".

¹⁰⁴¹ Ibid., p. 82 "عالم بأسره".

¹⁰⁴² Ibid., p. 130.

¹⁰⁴³ Ibid., pp. 25 - 26.

¹⁰⁴⁴ Ibid., p. 27; in the 'real' narrative, he also 'accidentally' spies on Tāj bathing (p. 61) in a desert oasis. The dream re-occurs at pp. 69 - 70; they are both naked, and he describes her as a "virgin mare followed by her powerful stallion" ("هي كفرس عذراء يلاحقها حصانها الفحل"). When they make love in the dream, he describes her as an "angelic virgin" ("تاج العذراء الملائكية"). At pp. 96 - 97 we find him escaping again to his imaginary paradise, his "قردوس خياله", his fantasy of a naked Tāj rising from the sea to make love with him; again at p. 124 he dreams of her naked in Hyde Park.

¹⁰⁴⁵ Ibid., p. 34.

while stranded with a Moroccan desert tribe, and embrace, Nādir recalls that he has never been so close to a girl, except at a school dance with many teachers present.¹⁰⁴⁶ Earlier, Nādir's sense of cultural shock at witnessing young Londoners dance together strongly recalls both Aldous Huxley's similar shock in the 1930s when confronted with American sexual mores and consumerism,¹⁰⁴⁷ as well as the very similar reaction of the Egyptian Muslim Brotherhood ideologue Sayyid Qutb to attending a church dance in 1940s Colorado.¹⁰⁴⁸

His next meeting with her finds him making a bitter quip about marriage, distressing the lovestruck Tāj.¹⁰⁴⁹ He is also amused by Tāj's childlike ignorance, although embarrassed by it when on one occasion she tells him that the sun rises in the West in London.¹⁰⁵⁰

While stranded in the desert, he sees Tāj's naked body when he spies upon her while she is bathing in the desert oasis; her body is described with salacious relish again during another bath when a Sahrawi tribesman attempts to rape her. Tāj is terrified of the potential rape, as she believes it is the worst thing that can happen to a virgin, but is treated harshly by Nādir after her captor dies during the attempt. When she pleads with him that she is still a virgin, he tells her not to "make things worse", while she swears to him that she is "pure".¹⁰⁵¹

The plot allows Nādir to achieve sexual experience with different – white – women without blame. When he wakes up inside Jebel Judi, he finds himself in bed with a naked blue-eyed blonde, Kathy Stewart, and anxiously questions her as to whether they have had intercourse. She reassures him that they have, but "bodily" only ("اتصال بدني"), and not to worry as she

¹⁰⁴⁶ Ibid., p. 44.

¹⁰⁴⁷ Atwood, *In Other Worlds*, p. 190.

¹⁰⁴⁸ "And they danced to the tunes of the gramophone, and the dance floor was replete with tapping feet, enticing legs, arms wrapped around waists, lips pressed to lips, and chests pressed to chests. The atmosphere was full of desire." Sayyid Qutb, *The America I Have Seen* (Essay, 1951). Full text may be found at https://archive.org/stream/SayyidQutb/The%20America%20I%20have%20seen_djvu.txt. Accessed 29.2.16. Qutb's reaction to his perception of America's decadent society was an important marker in his ideological journey towards the version of Islamic fundamentalism espoused by the Muslim Brotherhood. The scene is briefly echoed in Al-Baqqāli's *At-Tūfān Al-Azraq* (The Blue Flood), when Nādir, a man torn between traditional morality and sexual desire, dreams of London, its colours, clothes and bare legs dancing to modern music under psychedelic lights (p. 124).

¹⁰⁴⁹ Ibid., p. 29: "London is like marriage, in it you want to get out, and out of it you want back in!" ("لندن كالزواج، من فيها يريد الخروج منها، و من خارجها يريد الدخول إليها").

¹⁰⁵⁰ Ibid., pp. 29 - 30.

¹⁰⁵¹ Ibid., p. 61; pp. 64 – 68: "أنا طاهرة"، "لا تزيد الطين بلة!";

knows his thoughts were with the other woman (Tāj); Nādir is therefore reassured that while he has gained physical sexual experience, he remains a spiritual virgin for Tāj.¹⁰⁵²

Tāj is treated for radiation sickness by SANCTUARY, and cannot be saved, but, before her death, SANCTUARY tortures her in a special mirrored torture room for women that speeds up the ageing process. She is turned into a sixty-year-old woman, with white hair, and suffers upon seeing her reflection.¹⁰⁵³ There is a twist at the end of the tale: Tāj is killed by SANCTUARY, but her spirit is able to enter the dead body of Nādir's temporary girlfriend Carol, and in this guise she rescues him from the mountain in a helicopter. Crucially, this body-transfer is problematic for Nādir for several reasons; rationally, as he questions its scientific basis; emotionally as he is less attracted physically to Carol than to Tāj, and spiritually:

Was it possible for Carol's young, slim body to be carrying the fiery, fevered Eastern spirit of Tāj? Was it lawful (sharia) to swap bodies?¹⁰⁵⁴

هل يمكن لجسم كارول النخيف الطري أن يحتل روح تاج الشرقية الحامية المحرقة؟ وما شرعية تبادل
الأجساد؟

The 'Eastern' theme arises again here: when Nādir looks at Carol's body:

...he did not feel attracted to her as an Eastern man with the same heat as he felt towards Tāj...Western beauty had a time limit, and was not eternal like the Eastern beauty....¹⁰⁵⁵

فلم تجذبه إليها كرجل شرقي بنفس الحرارة التي جذبتة تاج...الجمال الغربي كان عنده مؤقتاً و ليس خالداً
كالشرقي...

The issue is half-resolved by the novel's ending. Nādir is rescued from the Moroccan desert on his own, his account disbelieved, and finds himself in a London hospital where Carol manifests as a nurse. The reader is offered the option of believing that 'it was all a dream'

¹⁰⁵² Ibid., pp. 71 - 73.

¹⁰⁵³ Ibid, pp. 122 – 123.

¹⁰⁵⁴ Ibid., p. 154.

¹⁰⁵⁵ Ibid., p. 155.

(thereby relieving the author of any need to justify the fantastical elements), and that the events occurred during a nervous breakdown. No-one can find a trace of Jebel Judi in the Moroccan desert, or any evidence that the events were real. The ending can also be read as part of Nādir's maturing process, as he is no longer dependent on fantasy, nor obsessed with the importance of the body.

Women in this novel are cast clearly in the virgin/whore mode; the sexism, perhaps more normalised in the British 1970s where part of the novel is set, is almost farcical in tone. At the beginning, upon learning that their passenger Dr Hellin is a famous scientist, the air hostesses immediately ask if he is married, and start flirting with him.¹⁰⁵⁶ When Nādir first meets another love interest, the red-headed scientist Carol Landkrieb, he jokes with her that she must be a statistical anomaly, as most attractive women lose interest in their studies and marry, and when immediately afterwards a large-breasted woman offers him a drink and he is told that she is only a maid, he laughs, saying that if they had told him she was a scientist, his faith in his former theory would have been shaken.¹⁰⁵⁷ Later, Carol is able to entice him to follow her swimming into the lake's depths in order to meet the other rebel scientists by allowing the string to come out of her bikini top.¹⁰⁵⁸

Relations between the team members in the *Milaff* revolve tightly around marriage. Nūr and Salwa's romantic interest in each other is apparent from the beginning, and by No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), Salwa is quick to take the 'visitor' aside to ask him what the history books have to say about Nūr's marriage.¹⁰⁵⁹ A rival for Nūr's affections is introduced in the form of an attractive and worldly presenter of *Video News*, Moushira Mahfouz, but Nūr's relationship with Salwa is safely sanctioned by marriage very early in the series, and in No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), Salwa is absent from the mission because she is pregnant with their first child, a daughter called Nashwa.

Although both Nūr and Salwa are shown to be doting parents, motherhood does not prevent Salwa from pursuing her career as a scientific intelligence officer; in the early books, Salwa simply asks her mother to mind Nashwa while she and Nūr go on their mission.¹⁰⁶⁰ Aged

¹⁰⁵⁶ Ibid., p. 6.

¹⁰⁵⁷ Ibid, p. 96: "لو كنت قلت لي إنها عالمة لزعت إماتي بجميع نظرياتي السابقة".

¹⁰⁵⁸ Ibid., p. 114.

¹⁰⁵⁹ Farouk, No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), p., 46.

¹⁰⁶⁰ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity), p. 21.

nine by No. 60 *Arḍ Al-'Amāliqa* (Land of the Giants), Nashwa's growth is artificially accelerated, and she joins the team as their computer expert.

To Farouk's credit, Nūr and Salwa's relationship is not an idealised one; No. 3, *Madinat al-A'māq* (City of the Deep), Nūr humiliates Salwa in front of the team by dismissing her theory about the culprit, leaving her "looking like a schoolchild who has failed" ("كانت تشعر بأنها تلميذة ... فاشلة")¹⁰⁶¹ but later in the same book he needs her skills to build a sonar device when he realises that the stolen gold-making machine is lying on the seabed, and gives her credit at the end as "our genius colleague" ("زميلتنا العبقريّة")¹⁰⁶².

When conflict arises between them, it is always resolved; in No. 58 *M'araka Al-Kūwākib* (Battle of the Planets), Salwa challenges Nūr's authority, objecting when he orders her to leave the ship, saying that they do not have military ranks and he does not have the right to order her. He says this is true but he is her husband, and she replies that as his wife it is her job to stay by his side.¹⁰⁶³ In No. 68 *'Uqūl Al-Shir* (Evil Minds), Salwa defies Nūr's orders again with the same argument, but Farouk makes Maḥmūd interrupt the discussion at this point, and the narrative reverts to action sequences.¹⁰⁶⁴

Nūr kills an alien who hits his daughter Nashwa in No. 90 *Ru'b Al-A'māq* (Terror of the Deep),¹⁰⁶⁵ asking it if it beat women on its planet, although in No. 37 *Al-Samā' Al-Muḥlāma* (The Dark Sky), Salwa has been brainwashed by the alien Blue Men, and Nūr seizes Salwa's wrist and forces her to come with him. Salwa resists strongly and he punches her, knocking her out.¹⁰⁶⁶ It is implied that on this one occasion, violence is acceptable because Salwa is not in her right mind and Nashwa's life is at risk, and "because of his great desire to save his wife".¹⁰⁶⁷ (He also knocks out Maḥmūd for the same reason in the next chapter). The Israeli villain Erich Friedmann also knocks Salwa out in No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), so that he can escape, but this is the act of a villain of whom Farouk disapproves.

¹⁰⁶¹ Farouk, No. 3 *Madinat al-A'māq* (City of the Deep), p. 54; the narrator of al-Quwīr's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), expresses affectionate exasperation with his tearful wife during an argument, asking himself why this cultured and educated woman whom he loves sometimes behaves like a silly girl ("كفتاة صغيرة حمقاء"), p. 42.

¹⁰⁶² Ibid., p. 120.

¹⁰⁶³ Farouk, No. 58 *M'araka Al-Kūwākib* (Battle of the Planets), p. 49.

¹⁰⁶⁴ Farouk, No. 68 *'Uqūl Al-Sharr* (Evil Minds), p. 45.

¹⁰⁶⁵ Farouk, No. 90 *Ru'b Al-A'māq* (Terror of the Deep), p. 111.

¹⁰⁶⁶ Farouk, No. 37 *Al-Samā' Al-Muḥlāma* (The Dark Sky), p. 103.

¹⁰⁶⁷ Ibid.

Both before and after her marriage, Salwa is frequently jealous of Moushira's flirtatious friendship with Nūr, and relations between them are frosty. In No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), Salwa tells Moushira that she won't understand the scientific explanation for the tremors, and Moushira mocks Salwa by telling her that if she didn't spend all her time reading scientific papers she might find it easier to... (the sentence is left unfinished).¹⁰⁶⁸

In No. 42, the allohistory *Al-Ard Al-Thāniya* (The Other World), Nūr's analogue self is married to Moushira Mahfouz and has a son by her, Ashraf. The analogue Nūr reveals that he did not marry Salwa, as he considered her immature (غير ناضجة),¹⁰⁶⁹ and the real Nūr concludes from this that he and the analogue Nūr are very different after all: “يبدو أننا مختلف تمامًا.”¹⁰⁷⁰

Moushira is a conservative's embodiment of the negative aspects of femininity, and a foil to Salwa – she flirts with Nūr, is concerned with her appearance and pursues a career in the media, while Salwa is serious, shy, interested in science and devoted to her family and her country. The length of the series, at 160 books, allows Farouk the time to explore and develop these relationships further. Moushira's vamp caricature is later softened and made respectable by marriage to Ramzy, but in the Gulliver-romance No. 60 *Ard Al-'Amāliqa* (Land of the Giants), he upbraids her for putting her journalism before the relationship, and tells her 'you are divorced'. Farouk leaves her “feeling like a dwarf in a land of giants”¹⁰⁷¹ – a pun on the title, and a harsh cutting-down to size of the series' independent female lead.

Yet Moushira can be generous; in No. 67 *Shayṭān Al-Faḍā'* (Satan of Space) Moushira notices that Ramzy is in love with Nashwa, and tells him that Nashwa loves him too (they eventually marry at the end of No. 69 *Al-'Ālam Al-Akhar* (The Other World)), while Moushira still has feelings for Ramzy. (Nūr still exercises some control over Nashwa even after her marriage, telling her in No. 70 *Al-Sitār Al-Aswad* (The Black Curtain) that she cannot go with them on a mission because Ramzy needs her and he is 'her future'.¹⁰⁷²) Moushira feels sad when

¹⁰⁶⁸ Farouk, No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), p. 118.

¹⁰⁶⁹ Farouk, No. 69 *Al-'Ālam Al-Akhar* (The Other World), p. 46.

¹⁰⁷⁰ Ibid.

¹⁰⁷¹ Farouk, No. 60 *Ard Al-'Amāliqa* (Land of the Giants), p. 111.

¹⁰⁷² Farouk, No. 70 *Al-Sitār Al-Aswad* (The Black Curtain), p. 71.

Ramzy and Nashwa reunite after Nashwa's return from another dimension, although she agrees to marry a new character, a tough street-fighter and geologist named Akram, who tells her in that he would "face a nuclear bomb for the sake of her beautiful eyes".¹⁰⁷³ Moushira does have some agency in this relationship, at first telling Akram that she is not a machine, and cannot switch her feelings from one man to another, so he has to win her over,¹⁰⁷⁴ and in No. 84 *Kanz Al-Faḍā'* (Space Treasure) she expresses doubts as to whether or not she can love Akram more than her work.¹⁰⁷⁵

The relationships between the male and female team members are therefore strictly governed by conservative social and religious codes, although not to the extent that the women cannot pursue careers outside the home. The character of Maḥmūd is stereotypically nerdy and effectively asexual, but the other characters are required to marry in order to be acceptable.

In the *Milaff*, while Salwa is regularly abducted by monsters or human villains and in need of rescue, this is not her sole function as a female character, as it would be in the classic tradition of Western pulp SF, where the heroine is a helpless creature seen chiefly as an erotic reward for the hero. She frequently bursts into tears and faints, and is actually abducted by a Bug Eyed Monster in No. 48 *Sijn Al-Qamr* (Moon Prison), when the moon monster the Pandolarius takes her to the subterranean alien city of Luna. She is also a kidnap victim in No. 54 *'Abr Al-'Uṣūr* (Across the Ages), when the time-travelling villain Ridwan seizes her in ancient Egypt and takes her to Renaissance Italy.

Most of the many scientists in the *Milaff* are male, but Dr Moustafa in No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil) is an archaeologist. Farouk takes care to show that Salwa's skills and knowledge are valuable to the team, and that she is a respected scientist whose work is recognised by other characters in the series. In No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), the scientist Hussein recognises Salwa because of her academic reputation,¹⁰⁷⁶ and she often invents communications devices that save the lives of the team.

In No. 3 *Madinat al-A'māq* (City of the Deep), she builds a sonar device to locate the missing gold-making machine on the seabed, and in No. 55 *Asrā Al-Zaman* (Prisoners of Time) Nūr

¹⁰⁷³ Farouk, No. 83 *Arḍ Al-'Ādam* (Non-Existent World), p. 107.

¹⁰⁷⁴ *Ibid.*, p. 132.

¹⁰⁷⁵ Farouk, No. 84 *Kanz Al-Faḍā'* (Space Treasure), p. 115.

¹⁰⁷⁶ Farouk, No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), p. 23.

has an ear implant that allows him to pick up radio messages from simple radios constructed by Salwa, while in No. 56 *Shayṭān Al-Ajyāl* (Satan of the Generations), she proves to the French Resistance that the team are from an advanced civilisation by building a television.¹⁰⁷⁷ In No. 80 *Al-Naṣr* (Victory) she builds a drone to find a spaceship, and in No. 50 *Al-Uṣṭūra* (The Myth), she invents a universal, intergalactic translator, which she names after her daughter, ‘Nashwa 1’.¹⁰⁷⁸ Nashwa becomes a computer scientist who in No. 66 *Al-Shams Al-Zarqā’* (The Blue Sun) solves a computer problem just in time to save the Earth.

At the same time, Salwa is a traditional/conventional religious/conservative woman; for example, in No. 2 *Ikhtifā’ Ṣārūkh* (Vanishing Rocket), she says that she cannot be sent to interview the men at the observation centre as she would be on her own with two men, one of whom could be the spy.¹⁰⁷⁹ Occasionally, traditional stereotypes about women’s abilities seep into the narrative; in No. 35 *Mir’āt Al-Ghad* (Mirror of Tomorrow), a potential suspect has been wearing the same blue suit all day, and Salwa says her attacker wore a brown suit – as “women notice these things”.¹⁰⁸⁰

In Towfik’s *Ūtūbiyā* (Utopia), total sexual freedom is the norm for both Utopians and the underclass of Others. In Utopia, no girl holds out for more than three days, and sex with the African maid is part of the anti-hero’s morning routine,¹⁰⁸¹ while in the slums of Cairo traditional sexual morality has been abandoned, and sex is traded as a commodity among the poor.¹⁰⁸² This is implied to be the outcome of an irreligious surplus society among the elite, and desperate commodification among the poor. However, it is the value that the poor place upon the poor hero Gaber’s sister, raped by the anti-hero, that is the touch-paper that eventually lights the fire of revolution.

Women’s role in Arabic SF is generally closely tied to their traditional roles as wives, mothers and homemakers; if not an angel at the hearth like Rosita, then an angel in the lab, such as Nāra in Idris’ *Al-Jins ath-Thālath* (The Third Sex). This play bears a strong resemblance to Al-Baqqālī’s *At-Tūfān Al-Azraq* (The Blue Flood) and Mahmoud’s *Rajul taḥt*

¹⁰⁷⁷ Farouk, No. 56 *Shayṭān Al-Ajyāl* (Satan Across the Generations), p. 55.

¹⁰⁷⁸ Farouk, No. 50 *Al-Uṣṭūra* (The Myth), p. 15.

¹⁰⁷⁹ Farouk, No. 2 *Ikhtifā’ Ṣārūkh* (Vanishing Rocket), p. 73.

¹⁰⁸⁰ Farouk, No. 35 *Mir’āt Al-Ghad* (Mirror of Tomorrow), p. 46.

¹⁰⁸¹ Towfik, *Ūtūbiyā* (Utopia), p. 23; English version, p. 16.

¹⁰⁸² Ibid., p. 60: “...sexual prohibition was no longer one of our problems today, strangely enough. With all this poverty, the barriers of morality had collapsed, and sex had become the easiest thing to get.”

al-Ṣifr (Man Below Zero) in its specifically female advocacy for spiritual values and love, set in opposition to the arrogance of the male scientist hero who is humbled for seeking fame for his work. It opens in the laboratory of Dr Ādam, a microbiologist in his thirties, and his attractive young assistant, Nāra, who are conducting measurements for an experiment and joking with each other about male and female roles in life. After hearing a female voice calling him, Ādam finds himself whisked away to a dream-city populated by talking trees and learns that a deity called She, a kind of Ur-Lilith, has chosen him to help re-populate the earth with a ‘third race’.

When he returns to his ‘real’ life, he is tempted by a tall, beautiful blonde woman called Hilda who has travelled to Egypt and learnt Arabic in the hope of starting a relationship with him, but, after he realises after testing her that she cannot be the ‘She’ who called him, realises the truth and eventually marries Nāra. The happy ending is preceded by a tearful, intense episode where Nāra uses the death serum that Ādam used upon her favourite laboratory rabbit¹⁰⁸³ to attempt to kill herself, forcing Ādam to turn to prayer and invent the unlikely ‘life’ serum on the spot in order to save the woman he recognises, almost too late, as his true life partner.

Nāra declares that her human feelings are not incompatible with scientific rationalism; although now in tears, she tells Ādam that she understands his argument for using the rabbit, and the ‘good’ motivation of great scientists. She does not hold back on her searing criticism of Ādam’s emotional failings, telling him that his relationship with Hilda failed because he was afraid of “the storms of love”, and that this failure of nerve has affected his scientific achievements – he has failed with the serum because his only aim was fame.¹⁰⁸⁴

This emphasis on valuing love over work may have stemmed directly from Idris’ personal experience; according to Rudnicka-Kassem, his overriding interest in his work caused him to delay marriage until the age of thirty, even warning his future wife that he would repudiate her if their marriage interfered with his literary work (he did not, and the marriage was a

¹⁰⁸³ The use of a rejuvenating serum on rabbits may echo Al-Hakim’s use of a youth-giving injection tested on rabbits in his 1950 play *Lū ‘Araf Al-Shabāb* (If the Young Men Knew), which makes old men young, although they are unable to recognise their wives and children. ‘Azzām, *Al-Khayāl al-‘Ilmī*, p. 120 – 121.

¹⁰⁸⁴ Yusuf Idris, *Al-Jins al-Thālath* (The Third Sex), (Cairo: Nahḍet Miṣr, 1971), pp. 100 – 101:

فشلت في علاقتك مع هيلدا لأنك خفت من عاصفة الحب... تجارك بتفضل لأنها عندك مجرد وسائل تبقى بها عالم ومشهور...

happy one).¹⁰⁸⁵ She detects a feminist element in the play, being the undervaluing of women's role in society,¹⁰⁸⁶ but this is rooted in the traditional conservative paradigm of the angel at the hearth, and stereotypes abound when the Swedish scientist Hilda appears. Dazzled by her beauty, Ādam tells her that she does not “look academic”.¹⁰⁸⁷

Later, although Nāra is alone with him in his bachelor flat, delicacy appears to prohibit Ādam from telling Nāra exactly what the Scientist wants him to do with She. The presence of the doll-like Hilda, with her northern European blonde hair and brazen requests for love, is contrasted unflatteringly with the short hair and strict morals of Nāra. There is no character development for Hilda; she exists solely to tempt Ādam, and act as a European foil for the virtuous Egyptian Nāra, the Lilith to her Eve.

5.10.1 Queer Sexuality in Arabic SF

The central aspect of difference or otherness of aliens or robots, and the inherent ‘difference’ of speculative or SF worlds, provides the genre with obvious analogues for the exploration of queer sexuality;¹⁰⁸⁸ for Csicsery-Ronay, “aliens are by definition queers.”¹⁰⁸⁹

Homosexuality is utterly absent in the Arabic SF texts examined in this thesis. Apart from the coy reference to Nādir's bachelorhood in *At-Tūfān Al-Azraq* (The Blue Flood), when the police inspector searching Nādir's London flat after his disappearance asks if he was a “natural bachelor” (“أعزب طبيعي”),¹⁰⁹⁰ there are no references to same-sex relationships in the texts examined.

5.11 Conclusion

Utopian literature runs the gamut from tendentious allegory to the literarily skilful, subversive and provocative, the texts the contact points where the plates of ideology and literature jar and collide, or slide under each other to force the other's profile skyward. These

¹⁰⁸⁵ Rudnicka-Kassem, “Egyptian Drama and Social Change”, pp. 14 – 15.

¹⁰⁸⁶ Ibid., p. 159, pp. 163 - 165.

¹⁰⁸⁷ Idris, *Al-Jins al-Thālath* (The Third Sex), p.78.

¹⁰⁸⁸ For an overview, see Wendy Pearson, Chapter 10 “Science Fiction and Queer Theory” in James and Mendlesohn, *Cambridge Companion*, pp. 149 – 160.

¹⁰⁸⁹ Csicsery-Ronay, Jr., *Seven Beauties*, p. 202.

¹⁰⁹⁰ Al-Baqqāli, *At-Tūfān Al-Azraq* (The Blue Flood), p. 34.

literary creations; these science fictional, futuristic worlds, are inevitably subject to evaluation by the reader, inviting at least an implicit comparison with his or her contemporary society, a positioning on the sliding scale between utopian and dystopian.

This evaluation occurs irrespective of whether or not the narrative is set in the future or in the past, whether in a recognisable territory, the reader's own country, outer space or another universe. The texts examined here are all set on Earth (perhaps surprisingly for a genre so closely associated with space in the public imagination), and all mostly located in the Arab world, in fact, mostly in Egypt (with the exception of *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), set in Libya, and *At-Tūfān Al-Azraq* (The Blue Flood), set in London and Morocco).

The *Milaff* are ostentatiously Egyptian, with their overt patriotism and vision of Egypt as a future world leader; the 'real' world of Idris' *Al-Jins al-Thālath* is 1970s Cairo, and Mahmoud's *Al-'Ankabūt* (The Spider) is set in the same city. Although the action of *Rajul taht al-Ṣifr* (Man Below Zero) takes place mostly in London and Bolivia, the hero is Egyptian, and the most recently published, Towfik's *Ūtūbiyā* (Utopia) is set in a post-oil Egypt of 2020, between the elite of Marsah Matrouh and a ruined Cairo. Only the future world of Mūsa's *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) is ambiguous in its geographical positioning; only the names of Homo's friends, mentioned at the very beginning as he joins the workers' lines - David, Othman, Ibn Mohammad and Yaqub – identify them as Arab.

Al-Quwīrī's future Libya is politically neutral, blending fanciful technological speculation with the mundanity of family life (itself perhaps questioning how far technological advancement affects the quotidian), and both Idris' real and dream worlds are ultimately centred on the personal, not the political (which is largely true too of *At-Tūfān Al-Azraq* (The Blue Flood), a text that does not treat of politics except to censure SANCTUARY for overriding the democratic preference of the scientists not to destroy humanity).

None of Mahmoud's SF-inflected texts are very politically conscious, apart from the presentation of a co-operative, peaceful one-world government and surplus society in *Rajul taht al-Ṣifr* (Man Below Zero), but this abundance is specifically critiqued as an insufficient guarantor of human happiness, for which awareness of God is required. The

dystopian elements - the use of the drug Sa'ādūl, and the banned experiments on growing children in glass containers - owe an unmistakable debt to Huxley's *Brave New World*. The *Milaff*, as children's books, could not be expected to, and do not largely, deal in political ideology or ideal forms of government in the world of the future.

This leaves the two more mature and sophisticated texts, *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) and *Ūtūbiyā* (Utopia), both dystopian, and both of which engage intensely with the political sphere at its intersection with the personal, rather than as didactic or as a prescriptive blueprint for the ideal society. Both work as dystopias by creating a believable future world enhanced by technology, but with significant dissonances that strike the reader with the force of the 'wrongness' in each society, and both are redeemed only by accents of humanity in the heroes Gaber and Homo, who are both ultimately defeated by dystopian forces.

Ūtūbiyā (Utopia)'s history is a warning of the dangers of long-term single-commodity rentierism; the collapse of the oil market led to social breakdown and the retreat of the elite to an enclave. Set in Egypt and in the very near future, its title the clearest possible invitation to the reader. This is the boldest of the texts, considered in terms of time and place, as the ever-burgeoning economic polarisation sets it effectively in a parallel present. (The novel is to be made into a film for release in 2017; the reaction of the Egyptian audience in particular will be of great interest.)¹⁰⁹¹

Al-Sayyid min Ḥaql al-Sabānikh (Lord of the Spinach Field) is a warning against wealthy surveillance-societies that guarantee cradle-to-grave welfare in return for submission, as well as an anti-scientism message against giving machines god-like powers. The novel was published in 1982, during the Cold War period that was dominated by constant concern about superpower use of nuclear weapons, and this fear permeates the book backwards through time. Both this book and *Rajul taḥt al-Ṣifr* (Man Below Zero) are set in post-nuclear holocaust worlds that reflect this preoccupation.

Anomie arising from excessive leisure is figured as a problem afflicting surplus societies in several texts; while scientific advancement has provided the surplus, the human problem of

¹⁰⁹¹ <http://arablit.org/2015/06/02/ahmed-khaled-towfiks-utopia-to-be-made-into-big-budget-film/>, accessed 29.2.16.

boredom helps to create something of a hell in heaven's despite. *Rajul taḥt al-Ṣifr* (Man Below Zero) and *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) give particular consideration to the leisure problem. *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) also identifies this as an issue, but, in keeping with its light-hearted tone, it is not discussed in depth.

Gender relations in the texts reflect the authors' contemporary milieux to a great extent, as well as mirroring the early stereotypes of Western proto-SF. Farouk makes a commendable effort to show Salwa and Nashwa (and occasionally the redeemed Moushira) as valued team members, and Mūsa's Homo and Layla enjoy an equal and companionate though troubled relationship. *Ūtūbiyā* (Utopia), written in 2010, is of a later generation, and the relationships between men and women are deliberately drawn as mostly violent, as they are also allegories of class warfare. Stereotypes abound in the other texts, to a ludicrous extent in *At-Tūfān Al-Azraq* (The Blue Flood), although it should be remembered that such views of women were normalised in the popular culture of 1970s Britain (the novel is partly set in Britain, and was written in 1979), and that one of its major themes is the sexual *Bildungsroman* of the hero. It is perhaps worth noting that all of the authors are male; a further and more extensive study should also include the work of female authors such as the Kuwaiti mathematician and parliamentary candidate Tiba Al-Ibrahim, the Syrian children's writer Lina Kaylani and Omayma Khafaji.

For the Marxist critics Suvin and Bloch, an SF text should take its place on the historical front-line; it must raise political consciousness. Suvin disapproves of myth and fantasy, because he does not regard it as useful,¹⁰⁹² while Jameson views infantilism as a trait of Utopianism.¹⁰⁹³ The texts considered here perform at different levels in the raising of political consciousness. *Ūtūbiyā* (Utopia) is the most explicitly political and minatory text, warning of an immediately impending national disaster resulting from an economic catastrophe. Although marketed as SF and set in the future, technology is a plot facilitator rather than the focus of ethical discussion, and the narrative fulfils Suvin's criterion, an intention that the author has confirmed in interview.¹⁰⁹⁴

¹⁰⁹² Suvin, *Metamorphoses*, pp. 82 – 83.

¹⁰⁹³ Jameson, *Archaeologies*, p. 186.

¹⁰⁹⁴ Interview with the author, Cairo, 10 June 2013.

The *Milaff* series clearly seeks to foster national pride among children; although the emphasis is on Egypt, it is also an Arab pride that can be shared beyond Egyptian borders, and does not promote a specific ideology (other than a muted but persistent encouragement of Islamic belief, which will be discussed in the next chapter). Of the other texts, only *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) deals in sufficient detail with the problems of totalitarian surveillance-based government to satisfy Suvin as a politically-active text.

There is of course an Egyptian bias in this literature, as the majority of the authors in this study (except for the Libyan Al-Quwīrī and the Moroccan Al-Baqqāli) are Egyptian. Farouk clearly wishes his young readership to consider the possibility of Egypt being a world leader, while Towfik wishes his audience to consider the problem facing contemporary Egyptian society, and Mahmoud craves his readers' recognition of the importance of the spiritual world in the face of growing technological competition for the guarantee of human happiness. Only *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) operates on a broader pan-Arab level, expressing a more generalised fear of totalitarian government, softened by the provision of a full welfare society, and rationalised as a response to a post-nuclear holocaust world.

While Farouk and Mahmoud reference ancient Egypt as a source of pride, the future Arab world is imagined as internationalist, but with Arab scientists enjoying a position of world leadership, while Mūsa's more mature text has an elegiac tone, showing a bleak, totalitarian dystopia where even apparent freedoms are carefully calibrated mechanisms controlled by an authoritarian state using all-knowing computers (a device replicated in Al-Baqqāli's less subtle dystopia, whose hero, unlike Mūsa's, achieves salvation through smashing the machine and returning to God). How Arabic SF deals with belief in God and Islamic belief is the subject of the following chapter.

Chapter 6: Religion and Magic: the Supernatural

*Literary criticism should be completed by criticism from a definite ethical and theological standpoint...moral judgements of literary works are made only according to the moral code accepted by each generation, whether it lives according to that code or not.*¹⁰⁹⁵

6.1 Introduction

Following Eliot, writers and readers tend to approach literature as they do life, from an ethical and religious point of view, even if this is not a conscious or deliberate choice of lens. The practising believer reads with a weather-eye as to whether or not the text reinforces, challenges or contradicts their beliefs; readers unconcerned with faith or religious matters still constantly check and balance their own world-view with what they are reading, judging the characters, situations, the author and even their own response through that prism.¹⁰⁹⁶

Given the notionally privileged position of empirical scientific enquiry and technological developments in SF, one might suppose that the texts would have little consideration for either formalised religion or other supernatural beliefs; for Roberts, the genre is primarily a materialist, rather than a supernaturalist discourse.¹⁰⁹⁷ Yet despite this plausible premise, SF's speculative ethos, whether explicitly technological or not, renders it intrinsically open to an heuristic approach to the universe, in keeping with the genre's fondness for a 'sense of wonder', that is not necessarily confined to the material. The discourse is open to questions about the why rather than the how, to speculation about the purpose and origins of the universe, and about the rules for life, that intersect with the fields of religion and ethics.

¹⁰⁹⁵ T. S. Eliot, *Selected Essays* (London: Faber and Faber, 1932 (1959 reprint)), "Religion and Literature", pp. 388 – 389.

¹⁰⁹⁶ Ibid.: "When we read of human beings behaving in certain ways with the approval of the author, who gives his benediction to this behaviour by his attitude towards the result of the behaviour arranged by himself, we can be influenced toward behaving in the same way...The author of a work of imagination is trying to affect us wholly, as human beings, whether he knows it or not; and we are affected by it as human beings, whether we intend to be or not."

¹⁰⁹⁷ Adam Roberts, *Science Fiction* (London: Routledge, 2006), Introduction, p. 5; in a more extensive work, he finds that religious discourse is a natural flowering of SF: what he calls "...the deep roots of SF: the dialectic between the scientific-materialist and the religious-spiritual discourses." Adam Roberts, *The History of Science Fiction* (London: Palgrave Macmillan, 2005), p. 228.

While SF is a literature primarily characterised by scientific content or premises, it is therefore also suited to religious speculation; as the Panshin brothers suggest, it is “...an effective myth for our time because it respects both the actual and the transcendent”,¹⁰⁹⁸ or, for Farah Mendlesohn, “In a genre predicated on thought experiment, theological discourse comes naturally”.¹⁰⁹⁹

Religious content can be expected in SF not only as a consequence of the common science / religion dialectic where each competes to explain the universe, but also as part of the discourse around futurism, as in particular Semitic religion is not concerned only with the moral aspects of day to day living, but ultimately with life after death, as well as the apocalypse, followed by a judgment, reckoning and eternal life or punishment in heaven or hell.

Despite the tension in the popular public discourse between the ‘two cultures’ of science and religion - transcendence versus materialism, irrational versus rational, revelation over reason, - Scholes, following his definition of fabulation, finds that allegorical tales (stories characterised by discontinuousness from reality, but which take a cognitive approach to the narrative) are used often by religions precisely because they believe in an alternate reality,¹¹⁰⁰ while Matthew, in his study of Japanese SF, figures religion as a kindly partner to science:

Religion and ethics play a significant part (some would say a crucial part) in underpinning a society’s willingness to work productively, its attitude towards important social relationships, and its degree of readiness to accept change.¹¹⁰¹

The greater public profile and popularisation of science in 1930s Britain during the interwar period of social shift positioned science as a potential alternative to religion as a governing life principle (this growing materialism was embodied in the oppositional work of two public intellectual figures, mediaevalist and Christian apologist C.S. Lewis and Cambridge biologist

¹⁰⁹⁸ Alexei and Cory Panshin, *The World Beyond the Hill: Science Fiction and the Quest for Transcendence* (Tarcher, Los Angeles, 1989), p. 4.

¹⁰⁹⁹ Farah Mendlesohn, Chapter 20, “Religion and Science Fiction”, in Edward James and Farah Mendlesohn (eds.), *The Cambridge Companion to Science Fiction* (Cambridge: Cambridge University Press, 2003), pp. 274 - 275.

¹¹⁰⁰ Robert Scholes, *Structural Fabulation* (Notre Dame, Indiana: University of Indiana Press, 1975), p. 29.

¹¹⁰¹ Robert Matthew, *Japanese Science Fiction: A View of a Changing Society* (London: Routledge and Nissan Institute of Japanese Studies, University of Oxford, 1989), p. 146.

and popular science educator J.B.S. Haldane.)¹¹⁰² For the Panshin brothers, the SF response to this period was nothing less than a post war defence of the soul, and the same period saw an increased public interest in theosophy and occultism, which the Panshins read as a backlash to the scientific materialist movement.¹¹⁰³

Some speculative authors welcomed the element of openness to the spiritual: Huxley's experiences with LSD convinced him of "the importance of the numinous to a healthy society",¹¹⁰⁴ while in Russia, McGuire observed Soviet SF writers' high tolerance for supernatural phenomena such as telepathy and occult practices.¹¹⁰⁵ Religious organisations also took inspiration from SF; Thomas Disch suggests that the religious elements of SF have inspired cultic organisations, such as Aum Shinrikyo, Scientology (founded by the speculative fiction writer L. Ron Hubbard), and Heaven's Gate, also pointing out that the Russian theosophist Madam Blavatsky took inspiration from the work of Edward Bulwer-Lytton.¹¹⁰⁶

6.2 The role of religion in Western SF

The British writers of proto-SF moon voyages, such as Francis Godwin and John Wilkins were Christian, although Cyrano de Bergerac was an atheist, and a number of writers of the modern period who posited the existence of aliens were Christian.¹¹⁰⁷ Many Western SF and fantasy authors were religiously active;¹¹⁰⁸ although Wells, Asimov and many others were atheists, C.S. Lewis was an evangelical Christian, Tolkien and Verne Catholic and Kim Stanley Robinson Buddhist, while Ursula Le Guin's *Earthsea* quartet has Taoist inflections,

¹¹⁰² Patrick Parrinder (ed.), *Science Fiction: A Critical Guide* (London and New York: Longman, 1979), p. 76; Parrinder charts the literary war between the "spiritual Lewis and materialist Haldane". Lewis felt similar rancour towards the scientific materialism of H.G. Wells, whom he parodied as the odious public relations operative Jules in the third volume of his *Perelandra* trilogy, *That Hideous Strength* (1945), a text that relentlessly pillories scientific materialism.

¹¹⁰³ Alexei and Cory Panshin, *World Beyond The Hill*, Chapter 8, "The Death of the Soul", pp. 141 – 167.

¹¹⁰⁴ Adam Roberts, *History*, pp. 162 - 163. He also notes the later slide of American SF towards "mysticism, Dianetics, telepathy", p. 228.

¹¹⁰⁵ Patrick L. McGuire, *Red Stars: Political Aspects of Soviet Science Fiction* (Ann Arbor, Michigan: UMI Research Press, 1985), p. 22.

¹¹⁰⁶ Thomas M. Disch, *The Dreams our Stuff is Made of: How Science Fiction Conquered the World* (New York: Free Press, 1998), p. 53.

¹¹⁰⁷ Mark L. Brake and Neil Hook (eds.), *Different Engines: How Science Drives Fiction and Fiction Drives Science* (Basingstoke: Macmillan Science, 2008), p. 19.

¹¹⁰⁸ A list of SF and Fantasy authors and their religious backgrounds or affiliations may be found at http://www.adherents.com/adh_sf.html. Accessed 29.2.16.

following the author's spiritual leanings. Verne received a papal blessing,¹¹⁰⁹ and was widely approved by parents as a 'moral' author.¹¹¹⁰ British 1930s SF and fantasy is also characterised by a strong thread of modern paganism, intertwined with ecology and feminism in its modern incarnation following the revivalist Gardnerian/Wiccan tradition; E. Nesbitt and the popular 'spiritual shocker' author and Inklings member Charles Williams were associated with the occultist Order of the Golden Dawn.¹¹¹¹

The avowedly atheist SF of Asimov and Clarke explored post-religious society, while explicitly religious SF can be made to question the nature of God, vindicate a faith, or explore the expansion of an earth-bound faith to the cosmos. Pohl and Kornbluth's caustic dystopian satire *The Space Merchants* (1965) shears religion of all spiritual significance, making it merely an advertising account in a totalitarian, secular world.¹¹¹² Other texts deliberately highlight the perceived flaws in the world's dominant religions, such as Clarke's short story *The Nine Billion Names of God* (1953), where a computer shuts down the universe having completed its purpose of calculating all the names of God, or Catholic author Boucher's *The Quest for St Aquin* (1951), where a robot becomes aware of the existence of God.¹¹¹³

6.3 Religion in Arabic literature

Arab society is of course not monolithic, and neither is its literature, but Islam as a uniting characteristic is a dominant force in Arab society, and its imprint upon its literature cannot be ignored. For Siddiq, the position of religion is central in the Egyptian novel: "Only Graham Greene and C. S. Lewis write fiction so steeped in religion."¹¹¹⁴ The dangers inherent in writing about religion in a way that even implies heterodoxy are exemplified by the treatment

¹¹⁰⁹ Patrick Parrinder, (ed.), *Science Fiction: A Critical Guide* (London and New York: Longman, 1979), p. 110.

¹¹¹⁰ J-M. Gouvanic, *La Science Fiction Française au Xxe siècle (1900-1968)* (Amsterdam and Atlanta, Georgia: Rodopi, 1994), p. 45.

¹¹¹¹ Margaret Barbara Hiley, *Aspects of modernism in the works of C.S. Lewis, J.R.R. Tolkien and Charles Williams* (PhD thesis, University of Glasgow, 2006), p. 31. (This tradition continues in the modern fantasy of Terry Pratchett, Diana Wynne Jones and Neil Gaiman.)

¹¹¹² Frederik Pohl and C M Kornbluth, *The Space Merchants* (Harmondsworth, Penguin, 1965), p. 103.

¹¹¹³ Griffiths mocks satirical missionary literature, although in parody form it works as an allegorical tool for examining the ethical problems and misunderstandings arising from proselytising: John Griffiths, *Three Tomorrows: American, British and Soviet Science Fiction*. London: Macmillan, 1980), pp. 154 – 155. For an account of the role of religion in Western SF, see Tom Woodman, "Science fiction, religion and transcendence" in Parrinder. *Science Fiction*, pp. 110 – 130; also Adam Roberts on Golden Age religious fiction in Roberts, *History*, pp. 215 – 218, and Mohs Mayo (ed.). *Other Worlds, Other Gods: Adventures in Religious Science Fiction* (New York: Doubleday, 1971).

¹¹¹⁴ Mohammed Siddiq, *Arab Culture and the Novel: Genre, Identity and Agency in Egyptian fiction* (London and New York: Routledge, 2007), p. 101.

of Mahfouz' *Children of Gebelawi*, as well of its author, who was stabbed in 1994 by an attacker who claimed the heresy in this text as motivation, two years after the 1992 assassination of prominent Egyptian Muslim anti-fundamentalist Faraj Fūda.¹¹¹⁵ (The word heresy in Arabic is synonymous with the verb 'to innovate' or 'to begin'.)¹¹¹⁶

In such a climate, an orthodox approach is a safe and popular option; Richard Jacquemond observed that writers of an 'Islamic' character such as Egyptian SF author Moustafa Mahmoud had bigger print runs than even the most popular fiction writers.¹¹¹⁷ A religiously-practising society may impose strict orthodoxy upon its members, but the result is often, paradoxically, a greater interest in unorthodox spiritual and supernatural matters, including those that may be considered occult or, in Islamic terms, *shirk* - heterodox practices of polytheism, paganism or pantheism.

Prior at least to the Arab Spring revolution of 2011, a walk around the pavement bookshops of Cairo would have amply demonstrated the considerable local public appetite for translations of Dan Brown's supernaturalist novels, or of American New Age publications such as Rhonda Byrne's *The Secret*, the conspiracy theories of Muhammad 'Isa Da'ud,¹¹¹⁸ or the prolific output of the Egyptian popular psychologist Dr Ibrahīm Al-Fiqī.¹¹¹⁹ Human interest in the spiritual or supernatural is universal, and even in a predominantly atheistic society there may be a strong sub-culture of interest in such matters. However, in societies dominated by a particular religion, most particularly fundamentalist expressions of a religion whose scriptures declare harsh penalties for apostates or heretics, these supernaturalist and heterodox interests may flourish underground. It is interesting to note that Egypt has a growing base of horror fandom, alongside a readership with a deep interest in spiritual and supernatural matters.¹¹²⁰

¹¹¹⁵ Sheikh 'Umar 'Abd Al-Rahman claimed that if Mahfouz had been killed for writing *Children of Gebelawi*, Salman Rushdie would never have written the Satanic Verses: Richard Jacquemond, tr. David Tresilian, *Conscience of the Nation; Writers, State and Society in Modern Egypt* (Cairo: American University Press, 2008), preface, xi; pp. 57 - 61 for an account of the affair.

¹¹¹⁶ Hafez, Sabry. *The Genesis of Arabic Narrative Discourse* (London: Saqi Books, 1993), p. 21, quoting Edward Said.

¹¹¹⁷ Jacquemond, *Conscience*, p. 71.

¹¹¹⁸ David Cook, *Contemporary Muslim Apocalyptic Literature*, (New York: Syracuse University Press, 2005), p. 16.

¹¹¹⁹ Further information on the late doctor's output of positive thinking and self-help may be found on his website, <http://ibrahimelfiky.com/>.

¹¹²⁰ See Marla Lynx Qualey's blog post in <http://arablit.org/2013/10/31/for-h-day-arabic-horror-literature/>. Accessed 29.2.16.

6.4 Religion in Arabic SF

The opening of the Qur'ān's *Sūrat al-Fātiḥah* with a reference to the "Lord of Worlds", and the fantastical journeys, the *Isrā'* and *Mi'rāj*, of the Prophet Muhammad suggest a potential ease in Muslim contemplation of supernatural spatiotemporal travel, a commonality it shares with other Semitic religions: SF critics 'Azza Ghānim¹¹²¹ and Maha Maḥmūd Khadr¹¹²² both figure the Old Testament vision of Ezekiel as an early prototype of the literature of alien visitation,¹¹²³ although neither of these Egyptian critics suggests that Muhammad's miraculous journeys were not divinely facilitated. In a society where a particular religious adherence is dominant, narratives that question the prevailing faith are a risky proposition, unless they are overt, devout religious allegory, like Dante's *Divine Comedy*, "a specifically religious voyage extraordinaire".¹¹²⁴

The effect of religious authority on literary freedom can be stifling to innovation, so the conceit of liminal or interstitial spaces in the fictive sphere affords the writer the chance to explore real social and political problems concealed only by a thin veil of allegory, potentially elevating speculative fiction from mere whimsy to a powerful vehicle for counter-hegemonic discourse. While authors such as Farouk use their art to honour their religion and are at pains to show that religion and scientific enquiry may not be mutually exclusive, others (admittedly an extremist minority) damn the literature as an offensive encroachment on the prerogative of the Creator.¹¹²⁵ There is a potential for literary cross-fertilisation in the other direction; as David Cook has shown, Muslim apocalyptic literature co-opts the futuristic elements of SF to create the demons of their conspiracy theories.¹¹²⁶ For Khammas, the feeling that futurism is itself inherently sacrilegious, given Islam's privileged position, is problematic with regard to the genre's development in the Islamic world.¹¹²⁷

¹¹²¹ 'Azza Ghānim, "Al-Ibd'ā al-fannī fī Qiṣaṣ al-khayāl al-'Ilmī." PhD Dissertation, University of Ain Shams, Cairo, 1988, p. 62.

¹¹²² Khadr, Maha Maḥmūd. "Binā Ruwāyat al-Khayāl al-'Ilmī fī al-Adab al-Miṣrī al Muṣīr." PhD Dissertation, Cairo University, 1999, p. 32.

¹¹²³ The Bible, Book of Ezekiel, Chapter 1, verses 1 – 5. The surreal description of the four living creatures' wings, wheels and eyes is a popular trope among enthusiasts of 'ancient alien' theories.

¹¹²⁴ Roberts, *History*, p. 32; Godwin's *Man in the Moone* (1638) and similar texts, though speculative, were bound by religious authority, pp. 38 - 9.

¹¹²⁵ See Fatwa no 3324 by Shaykh Muhammed Salih al-Munajjid. (www.islam-qa.com/en/ref/3324). Accessed 29.2.16.

¹¹²⁶ Cook, *Contemporary Muslim Apocalyptic Literature*, pp. 71 – 83.

¹¹²⁷ "The almost complete lack of the element of "Futureness" is characteristic of Arabic literature in its entirety - as it is of broad aspects of life. For the future is in the hand of God only and it is almost sacrilegious to want to phantasise about his plans...The only surviving promise of healing is that of the religions. But their

What, if any, is the role of Islam in the brave new (technological) world of the science fictional future? Is the literature morally programmatic, conspiracy-driven, superstitious? Is there a tendency to offer the reader a choice between rationalism or religion? Does the acceptance of the technology of modernity also require a full acceptance of its thought-systems?

Allen reminds us that the suggestion of Mahfouz's *Children of Gebelawi* "...that religion is the loser in a confrontation with modern science"¹¹²⁸ was ill-received in Egypt (although Mahfouz was undeterred by religious criticism to the extent that he publicly supported Salman Rushdie during the fatwa against the 'Satanic Verses').¹¹²⁹ However, following Farouk's robustly-defended view that science and faith are not competing magisterial, Islam is confidently co-opted as a legitimate and respectful SF/fantasy theme by Dr. Naif Al-Mutawa, the creator of the popular *The 99* comic book series, discusses its creation and motivation in an open letter to his young sons:¹¹³⁰

Khalid, you were born in New York City, shortly after 9/11. I had already made a decision that I needed to find a way to take back Islam from its hostage takers, but I did not know [sic] how. The answer was staring me in the face. It was a simple, and as difficult, as the multiplication of 9 by 11: 99. So, at the age of 32, I uncapped my pen to create a concept that could be popular in the East and the West. I would go back to the very sources from which others took violent and hateful messages and offer messages of tolerance and peace in their place. I would give my heroes a Trojan horse in the form of THE 99. Islam was my Helen. I wanted her back. THE 99 references the 99 attributes of Allah – generosity, mercy, wisdom and dozens of others not used to describe Islam in the

protagonists, too, are a long way from showing people credible alternatives and models of a desirable future. Furthermore, phantasy in the strict Islamic sense means creative power - and creation is the domain of God alone. Tough times ahead, therefore, for Arabic-language SF writers." Achmed Khammas, "The Almost Complete Lack of the Element of 'Futureness,'" tr. Don Mac Coitir. <http://www.heise.de/tp/artikel/23/23713/1.html>. Accessed 29.2.16.

¹¹²⁸ Roger Allen, *The Arabic Literary Heritage*, (Cambridge: Cambridge University Press, 1998), p. 101. See also Matti Moosa, *The Origins of Modern Arabic Fiction*, 2nd edition, (Boulder and London, Lynne Rienner Press, 1997), pp. 370 - 371.

¹¹²⁹ Snir "Modern Arabic Literature and Islamist Discourse" (Journal of Arabic and Islamic Studies V, 2003 - 4), p.123.

¹¹³⁰ The full article may be found at: <http://www.al-mutawa.com/articles/a-letter-to-my-sons/>. Accessed 29.2.16.

media when you were growing up. But if I am successful, by the time you read this, you will not believe that such an era could have ever existed.

The publication of *The 99* is clearly an explicit attempt to combine the SF tropes of superheroes and futurism with pride in the practice of Islam. In this, the author's ethos and motivation are very similar to those of Farouk.

Superstition is often questioned in the *Milaff*, but Islam is not. Man's scientific achievements are kept firmly in their place in relation to Allah's creation. No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor) and No. 50 *Al-Uṣṭūra* (The Myth) both open with Nūr marvelling at the beauty of nature and the solar system, remarking to himself that, although man has advanced far in science, nothing compares to the beauty of creation.¹¹³¹ Similarly, in No. 37 *Al-Samā' Al-Muḥlāma* (The Dark Sky), the first in a trilogy about alien invasion, the astronomer Dr Sabry says that his work is the study of Allah's creation.¹¹³²

Space phenomena are also classified as under the authority of God; in No. 69 *Al-'ālam Al-Akhar* (The Other World), Dr Ḥijāzi and Ramzy examine a space virus with an ion microscope and find that it looks like a net surrounded by points of silver ice, whereupon Ramzy declares that it must be the work of the Creator.¹¹³³ In No. 96 *Budhūr Al-Sharr* (Seeds of Evil) Moushira and Akram are looking at the alien plants of Plantouria through a fibreglass tent, wondering why water would have caused them to stop growing, and concluding that this must be the way Allah created them.¹¹³⁴

The question of how to reconcile respect for Allah's creation and human scientific interference with the natural world is explored in No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) and No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet). In the former, when Nūr and the Intelligence Chief are talking about eternal life, the Chief says that the natural law set by the

¹¹³¹ Farouk, No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), p. 5; No. 50 *Al-Uṣṭūra* (The Myth), p. 6, the intelligence chief invites Nūr into his office to show him a hologram of the solar system, and Nūr marvels at the beauty of creation.

¹¹³² Farouk, No. 37 *Al-Samā' Al-Muḥlāma* (The Dark Sky), p. 9; also in No. 86 *Al-Imbirātūr* (The Emperor), p. 5, the team look out to space, at all the stars, suns and moons are ordered by the Creator ("عز وجل") and by God ("بإذن الله سبحانه وتعالى").

¹¹³³ Farouk, No. 69 *Al-'ālam Al-Akhar* (The Other World), pp. 75 - 76.

¹¹³⁴ Farouk, No. 96 *Budhūr Al-Sharr* (Seeds of Evil), p. 76.

Creator decides the time of death and birth, referring to a natural balance, and that the scientist's work threatens this balance:¹¹³⁵

إن قانون الطبيعة الذى أبدعه الخالق (عز و جل) , يحتم حدوث حالات الوفاة , المقابلة الزيادة التى تصنعها المواليد , و إلا أنت فترة تضيق فيها الأرض بمن عليها , و أصبح حتماً اللجوء إلى القتل لإعادة هذا التوازن الطبيعة.

The scientist Shafiq expresses concerns about their genetic research that aims to produce a hybrid vegetable-animal creature, saying that the monotheistic faiths allow limited freedom only to effect changes (in life):¹¹³⁶

فحتى الأديان الساموية تمنح حرية محدودة بما لا يؤذى الغير

The choice is a moral one; scientists in the *Milaff* are expected to know and respect the natural boundary between the Creator's work and their own. In No. 46 *Al-Kawkab Al-Mal'un* (The Cursed Planet), Dr Ala creates a replica earth in a laboratory, but we know that he is no mad scientist in the mould of Farouk's usual villains, because he says that this was done with God's help:¹¹³⁷ *و فُتِنَى اللّٰهُ (سبحانه و تعالى)*. When a number of scientists mysteriously die after being left alone in the warehouse with the artificial planet, another scientist, Dr Walid, says that he opposed the project on principle, because it is not right for man to create a replica of the earth, creation being the right of Allah alone, and that it is wrong for human to embellish it:¹¹³⁸

فليس من حقّ بشرى أن يصنع عالماً لذاته ... الخلق هو سمة الله (سبحانه و تعالى) وخده , و ليس من حقنا أن نحاول تقليده.

Dr Shawqi defends the scientist's right to manipulate nature, arguing that it was Allah who made everything out of nothing, and drawing a distinction between creation and fabrication: humans only 'manufacture' things such as aeroplanes, submarines and warships with the existing materials created by Allah:¹¹³⁹

¹¹³⁵ Farouk, No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) p. 17.

¹¹³⁶ Ibid., p. 55.

¹¹³⁷ Farouk, No. 46 *Al-Kawkab Al-Mal'un* (The Cursed Planet), p. 7.

¹¹³⁸ Ibid., p. 54.

¹¹³⁹ Ibid., pp. 54 - 55.

و من قال إننا نفعل؟ لقد خلق الله (سبحانه و تعالى) كل شيء من العدم , أما نحن فنأخذ ما خلقه (سبحانه) و نصنع منه إنجازًا علميًا جديدًا , و تمامًا , وكما صنعنا الطائرات و الغواصات , و سفن الفضاء ... إننا لا نخلق يا ولدى , معاذ الله , إننا نصنع فحسب.

Walid's piety does not save him; both he and Shawqi are killed by the tiny civilisation that has evolved on the manufactured planet firing miniature atomic weapons that they have developed into their brains. The implication that working with living genetic material, instead of metal and minerals, would also count as 'manufacture' is not further explored, although the deaths of the scientists who made the planet are Farouk's clear passing of judgment on their actions.

At the end, the Chief asks Nūr if he thought the tiny people were really an advanced race. Nūr replies, who knows? The monotheistic books say that there are seven earths and seven heavens, so perhaps they were from another of these, and perhaps these little people were not just like the ones in Gulliver from the imagination of Jonathan Swift - or we ourselves are an experiment:¹¹⁴⁰

من يدرى يا سيدى؟ ... لقد أشارت الكتب السماوية إلى وجود سبع أراضٍ, و سبع سموات, و ربما كانت هذه المخلوقات المسكينة من أرض تشبهنا ... ربما لم تكن رواية (جيلفر) و رحلاتها الأقزام و العمالقة مخرد خيال من مؤلفها (جوناثان سويت)...

The moral of this story is that scientific tampering with nature can easily get out of control, and creation is best left within the domain of God.

Similar sentiments are also expressed in No. 61 *Al-Kābūs* (The Nightmare), when Ramzy rebukes the brain surgeon Dr Ibrahim saying that God alone should allocate life-span.¹¹⁴¹ In No. 115 *Al-'Adūw Al-Khāriq* (The Supernatural Enemy) Dr Ḥijāzi gives a speech about how the Creator made the human body with each cell for a purpose, and how we try to change that or damage it by drinking or smoking (a very obvious directive to a young readership, reflecting strict Islamic attitudes towards these activities).¹¹⁴²

¹¹⁴⁰ Ibid., pp. 114 - 115.

¹¹⁴¹ Farouk, No. 61 *Al-Kābūs* (The Nightmare), p. 18.

¹¹⁴² Farouk, 115 *Al-'Adūw Al-Khāriq* (The Supernatural Enemy), pp. 159 - 160.

Although the *Milaff* series makes little pretence of verisimilitude, and the novels were written for children so could not be expected to deal in great depth with matters of faith or science, there is no real discussion of why the research in each might be morally wrong, other than by simple reference to creation and modification of living things being the domain of God alone. The purpose of the attempt to create an animal/vegetable hybrid in No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity) is not explained, and in the context of the narrative is designed merely to evoke horror of the experimental and of physical oddity, while the creation of a replica earth in No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet), which has possible scientific usefulness as a working model to solve geological problems, represented by the scientists' declared intention to test the earth's crust with a few earthquakes and volcanic eruptions, is not fully explained, other than to say that the achievement might win a Nobel prize for its inventors. Both scenarios result in the deaths of the scientists behind these experiments, which are framed as heretical, and give other characters the opportunity to condemn them as wrong.

Farouk makes the team careful to give thanks for happy endings to their adventures to God. In No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), when Nūr returns to tell them that the spy Erich Friedmann is dead, he says that his death was God's justice ("عدالة الله"),¹¹⁴³ he also gives credit to God for their victory over the Americans in No. 84 *Kanz Al-Faḍā'* (Space Treasure),¹¹⁴⁴ and at the end of No. 83 *Arḍ Al-'Ādam* (The Non-Existent World), when the team are rejoicing after the Atlantean robot S-18 rescues them, their joy is indescribable, but Farouk says that it was the Creator who was responsible: (كانت دفقة من رحمة الخالق عز وجل).¹¹⁴⁵

However, in No. 90 *Ru'b Al-A'māq* (Terror of the Deep) when the team are seeking a cure for Nashwa's life-threatening age-reversal condition, Salwa and Hijazi tell Nūr that with Allah's help they will find a way to cure her, and warn him not to make the departed S-18 an obsession. Interestingly, this does not prevent Nūr from calling on S-18, not Allah, for rescue, and S-18 does appear as a *deus ex machina* figure to rescue him.

The *Milaff* characters also pray in times of trouble. In No. 40, *'Alāmāt Al-Khawf* (Signs of Fear), Nūr, desperately trying to enter the chamber where Salwa and Maḥmūd are about to be

¹¹⁴³ Farouk, No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), p. 106.

¹¹⁴⁴ Farouk, No. 84 *Kanz Al-Faḍā'* (Space Treasure), pp. 26 - 27.

¹¹⁴⁵ Farouk, No. 83 *Arḍ Al-'Ādam* (Non-Existent World), p. 126.

sacrificed, prays to Allah to help him find the right button to open the door (it works);¹¹⁴⁶ on the final page he credits Allah with giving him the solution and enabling him to destroy the signs of fear. In No. 54, *'Abr Al-'Uṣūr* (Across the Ages), Salwa prays for rescue when held prisoner in 15th century Rome.¹¹⁴⁷ Ramzy in No. 96 *Budhūr Al-Sharr* (Seeds of Evil) prays for Allah's blessing on their attempt to deflect a dangerous laser into a storm,¹¹⁴⁸ and in No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), the Chief wishes Nūr success from Allah when he sends him on a mission, and wishes him God's support when he launches a rocket.¹¹⁴⁹ Even in No. 83 *Arḍ Al-'Ādam* (The Non-Existent World), when the robot S-18 has rescued the team by using 'proton energy' to re-open a portal to another dimension, Farouk says that it was Allah who was responsible:¹¹⁵⁰

كانت دفقة من رحمة الخالق (عز و جل)

There is no mention of other Islamic obligations – we do not see the characters undertake Hajj, for example, or talk about *zakat*, observe Ramadan or proselytize by undertaking *da'wah*. In No. 48 *Sijn Al-Qamr* (Moon Prison), when the arrogant Russian Vassiliev offers vodka to the team, Nūr replies that their religion forbids them from drinking alcohol,¹¹⁵¹ and by the end of the book, Vassiliev seems to have had a change of heart, thanking God for their safe return, and offering them orange juice instead, actually blushing as he tells them that he has stopped drinking vodka. References to Islamic practices, other than in debate on the morality of certain scientific experiments, are generally minimal, and we would expect a certain amount of common naturalistic expressions that are regularly repeated by believers in everyday life, for example, the name of Allah often being followed with the formula عز و جل or سبحانه و تعالى.

The Qur'ān is infrequently referenced or quoted in the *Milaff*, but when it is mentioned, its verses are presented as *sola scriptura*, as the ultimate, unquestionable source of authority. When the Chief looks at the corpse of the Tibetan demon-monk in No. 146 *Al-Buq'a Al-Muḥlama* (The Dark Spot), he quotes the Qur'ān, wishing Allah's blessing on the team, after saying that the secret of their success is their faith in God, together with their professional

¹¹⁴⁶ Farouk, No. 40 *'Alāmāt Al-Khawf* (Signs of Fear), p. 81.

¹¹⁴⁷ Farouk, No. 54 *'Abr Al-'Uṣūr* (Across the Ages), p. 89.

¹¹⁴⁸ Farouk, No. 96 *Budhūr Al-Sharr* (Seeds of Evil), p. 68.

¹¹⁴⁹ Farouk, No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), p. 18, p. 65 respectively.

¹¹⁵⁰ Farouk, No. 83 *Arḍ Al-'Ādam* (The Non-Existent World), p. 83.

¹¹⁵¹ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison), p. 24.

scientific expertise. The Chief is paraphrasing the Qur'ānic verse, which is provided in a footnote.¹¹⁵²

لأنهم يتقون الله (سبحانه ونعالى) يا رجل، ومن يتف الله يجعل له مخرجاً، ويرزقه من حيث لا يحتسب ...

The Qur'ān is quoted in support of both science and magic; in No. 48, *Sijn Al-Qamr* (Moon Prison), Nūr and the Chief discuss the possibility of life on the Moon, which is thought to be waterless. The Chief quotes the Qur'ān, saying that everything is made of water, (adding that this is also a scientific principle): “وجعلنا من الماء كل شيء حي”.¹¹⁵³ In No. 27 *Al-Fakhkh Al-Zujājī* (The Glass Trap), after finding a man apparently turned into a glass statue, Maḥmūd finds a book called ‘Black Magic: How to turn a man into ice’, and Salwa asks Ramzy if he believes in magic. He hesitates before replying that he cannot deny its existence, because it is mentioned in the Qur'ān.¹¹⁵⁴

لا يمكنني نفى وجوده على الأقل... فلقد ذكره القرآن الكريم.

Nūr quotes a Qur'ānic verse in No. 28 *Al-Nahr Al-Moqaddis* (The Sacred River) to support Ramzy: “...and of knowledge ye have been vouchsafed but little”.¹¹⁵⁵

وما أوتيتم من العلم إلا قليلا

Turning to the other texts, the religious elements in Yusuf Idris' play *Al-Jins ath-Thālath* (The Third Sex) are subtly handled. Ādam's name is no coincidence; he is invited to be a new father for the human race in the dream City, where the Scientist tells him the story of mankind in the context of Semitic religious tradition, figuring Cain and Abel's quarrel as the source of mankind's problems. In Ataba square, the audience is reassured that Ādam is a religious man, believing in Allah as well as in science. Idris does not present him as an arrogant atheist, but as a believer whose priorities have become skewed and require fixing. Tellingly, at the end when Ādam is humbled by Nāra's near-suicide, he resorts to prayer, and

¹¹⁵² Farouk, No. 146 *Al-Buq'a Al Muzlama* (The Dark Spot), p. 60. The actual verse is Qur'ān 65 (At-Tālāq): 2 – 3: “و من يتق الله يجعل له مخرجاً، و يرزقه من حيث لا يحتسب”

¹¹⁵³ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison), p. 17; the verse is Qur'ān 21 (Al-Anbiyā): 30: “we made every living thing of water” (trans. Quranexplorer.com).

¹¹⁵⁴ Farouk, No. 27 *Al-Fakhkh Al-Zujājī* (The Glass Trap), p. 54.

¹¹⁵⁵ Qur'ān 17 (Al-Isrā'): 85. Translation from quranexplorer.com.

we are invited to assume that this prayer is what inspires him to create the antidote that saves her.¹¹⁵⁶

Orthodox religious and supernatural beliefs are very prominent in Mahmoud's SF-inflected work. In *Al- 'Ankabūt* (The Spider), the bald man who is lured to the secret laboratory of the villain Damiān as an unwitting experimental subject, believing he is about to be cured of his baldness, makes a short statement of faith before the procedure begins: "ربنا يجعل في يدك الشفا", to which Damiān responds "بإذن الله الاعتماد على الله" – these are of course common phrases, but their utterance by both men is still significant, given that one is about to take the other's life by testing an hallucinogenic drug on him.¹¹⁵⁷ In *Rajul taht al-Şifr* (Man Below Zero), after the disappearance and presumed death of Shāhīn in space, the villain 'Abd Al-Karīm feels that his feelings of guilt are "heavenly justice" ("هناك عدالة سماوية"); considering his conscience and intention, he was a murderer, and if there is a hell, he is bound for it:¹¹⁵⁸

و على مستوى الضمير و النية هو قاتل..و مصيره جهنم إذا كنت هناك جهنم...

There is room for doubt in the Islamic view of hell here; the guilt-ridden 'Abd Al-Karīm goes on to muse that there might not be a hell, and that our passage through life in this world and the hereafter is a journey of growth, progress and development, a statement that meshes more with New Age or Buddhist beliefs rather than traditional Islam :¹¹⁵⁹

فإذا لم تكن جهيم...وإذا كانت رحلة الحياة في الدنيا والأخرة هي رحلة نشوة والاتقاء وتطور...

Shāhīn travels through space marvelling at it and its creatures – not just beings, but creatures – and on his journey to the sun actually discovers the presence of God. Allah is shown to be a physical, observable reality, though despised by metropolitan sophisticates on Earth, and remembered only by the humble Rosita.

In *Rajul taht al-Şifr* (Man Below Zero) the hero Shāhīn's introductory lecture on world history gives prominence to the common brotherhood of man as a social good. Mahmoud's enthusiasm for an internationalist approach to solving world problems is a continuous theme

¹¹⁵⁶ Yusuf Idris, *Al-Jins ath-Thālath* (The Third Sex) (Cairo: Nahḍet Miṣr, 1971), p. 106.

¹¹⁵⁷ Moustafa Mahmoud, *Al- 'Ankabūt* (The Spider) Fifth Edition (Cairo: Dār Al-Ma'ārif, 1989), p. 53.

¹¹⁵⁸ Moustafa Mahmoud, *Rajul taht al-Şifr* (Man Below Zero) (Cairo: Dār Akhbār Al-Yawm, 2008), p. 85.

¹¹⁵⁹ Ibid.

throughout the novel, and it is interesting that his hero describes not only the breakdown of national borders but also of religious divisions in his enumeration of the oppositional types who realise, post-War, that they are no different from each other; the examples feature not only the usual opposing pairs of Russians and Americans, or colonialists and their colonised peoples, or the judge and the criminal, but also the realisation of the Christian that he is no different from the Buddhist in terms of his common humanity (“وأدرك المسيحي أنه كن يختص “بالجنة دون البوذي”). As an Egyptian writer, it is perhaps more interesting that Mahmoud did not choose to express this feeling of brotherhood between Christians and Muslims. This may have been due to his personal interest in the religions of the Far East, and an outworking of his expressed wish for the Middle East to look to the Far East, rather than the West, for development and growth, or an attempt to continue the metaphor of true internationalism.

In *Rajul taht al-Ṣifr* (Man Below Zero), in keeping with the author’s syncretistic leanings, a student interrupts Dr Shāhīn’s expository lecture while he is listing the physical benefits that science has brought to the rebuilt post-apocalyptic world, telling him that “man cannot live by bread alone” (“إنه ليس بالخبز وحده يحيا الإنسان”), a direct quotation from the Bible, following Shāhīn’s account of how even a prosperous surplus society there is still depression and despair, and the need for ‘something more’.¹¹⁶⁰ In consideration of this desire to balance and include other religions, the same student adds that the Qur’ān also explained this 1,500 years ago, saying that psychological poverty is what kaffirs (unbelievers) live in (“الضنك النفسى التي”) and quoting a verse in support of this:¹¹⁶¹

ومن أعرض عن ذكرى فإن له معيشة ضنكاً

There is perhaps an oblique critique of religious fundamentalism in Mahmoud’s *Rajul taht al-Ṣifr* (Man Below Zero), in the treatment of a student in the lecture audience who denounces the brave new world as one of the worst ages in history, an age of ignorance and vice (“أحط حيوانات “عصور التاريخ... وأنه عصر جاهلية ودعاة وثنية”). The student is described as bearded, as a signifier of religiosity, and the consequence

¹¹⁶⁰ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero), p. 30; quoting the New Testament, Book of Matthew, 4:4, spoken by Jesus during his Temptation, when refuting Satan’s invitations to turn the stones of the desert into bread. Shāhīn’s remark here proves a sarcastic rejoinder from a gum-chewing student who says that this is ‘not daily bread, but bread with vitamins, and milk and chocolate too’ referring to the one world government’s addition of vitamins to food (ibid.).

¹¹⁶¹ Ibid.: the verse is Qur’ān 20 (Ṭa Ha): 124: ““But he who turneth away from remembrance of Me, his will be a narrow life”. Translation from quranexplorer.com.

of his remarks is his forcible removal from the lecture and an injection of the pacifying drug Sa'ādūl.

As the sun's gravitational force draws the disembodied Shāhīn towards it in space at the end of the book, he says that he has a feeling of "returning to the wellspring" – "شعور العائد إلى المنبع" – comparing himself to an arrow fired from a hunter's bow, shooting human beings through time and space, travelling with longing towards the absolute:¹¹⁶²

هناك يتوتر القوس بأقصى طاقته...ليطلقنا نحن السهام الصغيرة من قيودنا ويرسلنا محلقين في اللازمان واللامكان
مهاجرين في شوق إلى المطلق...

Shāhīn tells his audience of students that "the sun will go out in thirteen million years, and other stars are fast approaching, warning his audience on Earth that [the universe] "will melt and change into squeezed dough, about the size of a fist, of the primordial matter with which the Creator began":¹¹⁶³

و (سوف) تذوب و تتحول إلى عجينة متضاغطة مثل قبضة اليد من المادة الأولية التي بدأ بها الخلق.

These statements, and 'Abd Al-Karīm's musings on life as a purification process and preparation for the next life, mirror Buddhist, rather than Semitic, beliefs. However, these suggestions run alongside repeated 'evidence' of the reality of God; Allah is not only real to believers such as Rosita, who equates him with love in the first chapter, as a love-struck student gazing at Shāhīn. She tells her friend that "as long as I love, Allah is present" ("ما دمت أحب...فالله موجود").¹¹⁶⁴ The theme of 'Allah is there' is repeated with greater frequency towards the end of the novel when Shāhīn, travelling in bodiless form through the solar system towards the sun, actually sees Allah as physically present (although he does not describe the appearance of Allah):¹¹⁶⁵

نعم فأنا أرى الآن في يقين أن الله موجود...بل هو الحقيقة الوحيدة التي غابت عنا جميعاً في غرور التقدم المادى ...

¹¹⁶² Ibid., pp. 91 – 92.

¹¹⁶³ Ibid., p. 23.

¹¹⁶⁴ Ibid., p. 34.

¹¹⁶⁵ Ibid., p. 92.

“Yes, I can see now with certainty that God exists...that he is actually the only truth that is hidden from us all by the illusion that materiality offers us”.

The world is watching as Shāhīn proclaims this vision of Allah in space, but Mahmoud shows the worldly, materialistic press as subsequently dismissive of God; they were quick to forget the details of the greater truth that Shāhīn had shown them, that Allah was there – they forgot, or pretended to have forgotten, or were blinded by the materialistic life in which they had submerged themselves again. The newspaper *Controversial Affairs* reported it as Dr Shāhīn’s embarrassing lapse from scientific thought, that he had lost his mind and suffered a shameful lapse; his words about Allah were just Sufi fairy-tales:¹¹⁶⁶

...وكالعادة أنستهم التفاصيل حقيقة كبرى أطلقها الدكتور شاهين... أن الله موجود... هل نسوا أو نتاسوا...
أو أعمتهم الحياة المادية التي غرقوا فيها من جديد.
كتبت جريدة (المادية الجدلية) إن ما قاله الدكتور شاهين يعد انتكاسة مخجلة للفكر العلمى...
وقالت في مقالها إن الدكتور شاهين فقد عقله وأصابه الخجل. وأن كلامه عن الله ترهات صوفية

As ‘Abd Al-Karīm travels further into space on his subsequent expiatory mission to seed Jupiter with life, the writer comments that everyone on Earth had forgotten everything about Allah, and sunk themselves into a fresh fever of scientific materialism:¹¹⁶⁷

ونسى الكل كل شيء عن الله و رفقوا في تلك الحمى المادية العلمية من جديد.

Rosita is the only remaining representative of faith, still defiantly opposed to the ‘science’ that has taken away her husband. She is given the novel’s last words, questioning when someone will tell the scientists to wait for a moment to look inside themselves, instead of turning their attention to the labyrinths of space, and that it is from the inside that everything comes:¹¹⁶⁸

متى تخرج لتقول لهم أن ينظروا لحظة إلى داخل نفوسهم بدلاً من أن يوجهوا مناظيرهم إلى متاهات
الفضاء... تقول لهم, إنه من الداخل يخرج كل شيء...

¹¹⁶⁶ Ibid., pp. 99 – 100.

¹¹⁶⁷ Ibid., p. 101.

¹¹⁶⁸ Ibid., p. 104.

The end finds her prostrating herself, praying and crying; the only person in an unbelieving world who still trusts and believes that Allah is there:¹¹⁶⁹

و كانت تسجد و تصلى و تبكى. كانت الوحيدة في عالم الكفر التي صدقت و آمنت أن الله موجود.

It is the neglected and sidelined Rosita who becomes Mahmoud's mouthpiece as an advocate for human love and religious belief to be given greater value than a slavish devotion to scientific progress.

The diarist-narrator of Yūsuf al-Quwīrī's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) records in one of his diary entries that he prays at night, and is experiencing a moment of spiritual enlightenment, when he is interrupted by his friend Dr Murād, a professor of physics at Tobruk University. When Murad asks him who is he talking to, he replies "the universe!" ("الكون").¹¹⁷⁰ Allah is mentioned only in the normal course of Arabic speech, and while the narrator prays he is clearly not overly religious. While remarking on his lack of tolerance for loud speechifying, the narrator says that preachers who do nothing but scream have almost disappeared from their age, just like the use of tarbooshes!¹¹⁷¹

أما الخطباء الذين لا يملكون غير الصراخ فقد ذهب عصرهم تقريباً مثلما ذهب عصر صنّاع الطرايش!

His joke allows the author to suggest what appears to be his hope that religious extremism will one day be a ludicrous relic.

In Ahmed Khaled Towfik's *Ūtūbiyā* (Utopia), set in a dystopian near-future Egypt of 2020, religion survives both in the elite enclave of Utopia and the slums of the dispossessed Cairene underclass. The teenage anti-hero refers to mosques, churches and synagogues in Utopia, but religion is only practised among the older generation who were not born in Utopia (the young have no interest in religion), who fear that their new life might be taken away, and who associate their wealth with the idea of a reward for piety.¹¹⁷² Amongst the dispossessed

¹¹⁶⁹ Ibid.

¹¹⁷⁰ Yūsuf al-Quwīrī, *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born), Benghazi: Dār Al-Rūwād), 1997, p. 62.

¹¹⁷¹ Ibid., p. 79.

¹¹⁷² Ahmed Khaled Towfik, *Ūtūbiyā* (Utopia) (Doha: Bloomsbury Qatar Foundation Publishing, 2010), pp. 17 – 18; also at p. 46, where he opines that religion is the only hope the poor have for a better life after death, while planes continually depart from Utopia for Mecca because, he reasons, of the older Utopians' fear of losing their

Others, sectarian divisions have disappeared, but only because poverty has made everyone equal.¹¹⁷³

For the non-believers, there is no moral code: “It’s Utopia’s all-purpose motto: Do what you want, as long as you don’t infringe on the property of the rest of Utopia’s residents”.¹¹⁷⁴

وهو شعار "يوتوبيا" العام: افعل ما تريد طالما لم تعد على مال باقي سكان "يوتوبيا"...

a dictum that recalls Augustine’s ‘dilige, et fac quod vis’ (and the Rabelasian ‘do what thou wilt’ and the modern occultist mantras of LaVey and Crowley); deliberately oppositional alternative systems to the Semitic faiths.

The young, who do not believe in the traditional religions, use Ouija boards and try to conjure spirits in cemeteries – practices derided by the narrator.¹¹⁷⁵ The only newspaper in circulation contains “a strange, sick mix of sex, religion, fairy-tales and conspiracy theories”,¹¹⁷⁶ suggesting that the appetite of a largely uneducated underclass is for the escapist and fantastical.

The ‘blue flood’ of the title of *At-Ṭūfān al-Azraq* is a flood of atomic rays that SANCTUARY wishes to release to destroy civilisation, but the phenomenon is named after Noah’s flood (just as the mountain that shelters them in the Moroccan desert is called Jebel Judi after the place where the ark was said to have landed).¹¹⁷⁷ An explicit comparison with the human failings that resulted in Noah’s flood, and the failings that tempt scientists to use SANCTUARY to unleash a new Blue Flood of deadly rays, is made during the exposition of the three options (wait, change, destroy) presented by the SANCTUARY scientists to the

good fortune. Ahmed Khaled Towfik, *Ūtūbiyā* (Utopia), tr. Chip Rossetti (Doha: Bloomsbury Qatar Foundation Publishing, 2011), pp. 11 – 12; p. 38.

¹¹⁷³ Ibid., pp. 59 – 60; English version, p. 49: “The paradise of sectarian equality has been realised...Since poverty has made everyone equal, no one knows any longer whether you’re Muslim or Christian, except when you announce that you’re going to Mecca on pilgrimage, or your inner wrist is exposed, showing a tattoo of the cross.”

¹¹⁷⁴ Ibid., p. 32; English version, p. 25.

¹¹⁷⁵ Ibid., pp. 21 - 22; English version, p. 15.

¹¹⁷⁶ Ibid., p. 115; English version, p. 98.

¹¹⁷⁷ Ibid., p. 79.

hero Dr ‘Aly Nādir,¹¹⁷⁸ and again when Nādir finds himself thinking of a Qur’ānic verse about Noah.¹¹⁷⁹

Nādir is deliberately presented as a worldly, though sexually inexperienced, character during the early part of the book while he is in London; he hardly mentions prayer or Allah, drinks whisky and has an unsuccessful sexual encounter with a girl he meets in a café. However, when he and his student Tāj, with whom he is in love, find themselves stranded in the Sahara desert and meet a Muslim tribe, his language changes, becoming more religious. When telling the tribe about the air accident that brought them there, he says that “Allah saved us” (“فجّنا الله”),¹¹⁸⁰ and covers Tāj’s head with a handkerchief when he notices a young man looking at her.

The old association of the desert with spiritual purity, and the city with apostasy, is brought into focus as Fāris, the son of the tribal sheikh, escapes from the camp. The sheikh laments how his son, who had memorised the Qur’ān, changed after studying at university and became an atheist, denying his people’s customs and calling their wise men charlatans. Nādir reassures the sheikh that this is only the “extremist thought” (“فقط التطرف في أفكار”) of a young man who enters a modern school and university.¹¹⁸¹

The sheik quotes a Qur’ānic verse to comfort himself over his son’s apparent apostasy,¹¹⁸² and when Dr Nādir, his religious faith renewed by his return to the Moroccan desert, is surrounded by men reciting Qur’ānic verses and chanting *dhikr*, he ponders the routine nature of his prayer life and recites a Qur’ānic verse himself: “I created the jinn and humankind only that they might worship Me”:¹¹⁸³

وما خلقت الجن والإنس إلا ليعبدون

¹¹⁷⁸ Ibid., p. 94.

¹¹⁷⁹ Ibid., p. 106: Surat 11 (Al Hoda), Verse 4 "It was said (unto him): O Noah! Go thou down (from the mountain) with peace from Us and blessings upon thee and some nations (that will spring) from those with thee. (There will be other) nations unto whom We shall give enjoyment a long while and then a painful doom from Us will overtake them." (Translation from quranexplorer.com).

¹¹⁸⁰ Ahmed Abd Al-Salām Al-Baqqāli, *At-Ṭūfān al-Azraq* (The Blue Flood) (USA (sic): Hasan Yahya Publishers, 2012), p. 35.

¹¹⁸¹ Ibid., p. 47; Nādir’s immediate thought is that the young man’s attempted escape is romantic.

¹¹⁸² Qur’ān 28 (Al Qaṣaṣ): 56: Lo! thou (O Muhammad) guidest not whom thou lovest, but Allah guideth whom He will. And He is best aware of those who walk aright. (نك لا تهدي من أحببت، ز لكن الله يهدي من يشاء). Translation from quranexplorer.com.

¹¹⁸³ Qur’ān 51 (Adh-Dhariyāt): 56. Translation from quranexplorer.com.

Nādir reasons with the sheik's recalcitrant son, telling him how he himself thought that he lived in the twentieth century, and his own father in the age of ignorance. The young man responds heatedly, saying that his father believes that the earth is flat, rejecting his father's child-like belief and simultaneously regretting he had ever left for the city, while bitterly quoting a saying of al-Mutanabbi (broadly translated as 'ignorance is bliss') to summarise his feelings:

ذو العقل يشقى في النعيم بعقله...وأجو الجهالة في الشقاوة ينعم

The young man has not in fact rejected God, but the pagan practices of his tribe, and the following extract from his justification to Nādir is a stark illustration of the jarring juxtaposition of Islamic *ijtihād* with the fantastical and SF elements of the narrative:-

I told them that they should return to God, that they should not trust in filling the people's minds with paganism and charlatanry. The word of God doesn't mean anything to them. They don't see it. They cling to the paganism of the first age of ignorance, making the first saints' tombs, and hanging up talismans and locks of hair around their necks. The women go to a rock, paint it with lime and make a fetish of it, and go to the trees and hang cuttings from their clothes on it; it's shameful. When I read about the mass ignorance before Islam, I couldn't find a difference between this and that time. I felt a desire to evangelise my people back to Islam and return to God. If only I hadn't done this! If only I'd remained blind like them!¹¹⁸⁴

قلت لهم أن يعودهم إلى الله، لا يمكن تصديق ما يملأ عقول هؤلاء الناس من وثنية و شعوذة. كلمة الله لم تعد شيئاً بالنسبة إليهم. إنهم لا يرونه. وقد ارتدوا في وثنية الجاهلية الأولى، فخلقوا الاضرحة و الأولياء و علقوا التمانم و العقارب حول أعناقهم. و توجه النساء نحوالحجارة فطلوها بالجيرو قدسوها، و إلى الأشجار فعلقوا عليها قطعاً من ملابسهم بدرجة مخجلة. حين قرأت عن المجتمع الجاهلي قبل الإسلام لم أجد فرقاً بينه و بين هذا. وشعرت بالرغبة في دعوة قومي إلى الإسلام و العودة إلى الله. و ليتني لم أفعل. ليتني بقيت أعمى مثلهم!

The narrative presents three milieux; metropolitan London, the world where Nādir is feted as an anthropologist; the desert, where pagan practices co-exist alongside Qur'ān memorisation

¹¹⁸⁴ Al-Baqqālī, *At-Ṭūfān al-Azraq* (The Blue Flood), p. 51.

and *dhikr*, and the secret underground world of the Jebel Judi scientists who have built SANCTUARY. The scene in the desert, where the international sophisticate Nādir, who has made his name as a scientist of sorts in the secular world, is compelled to remember his Muslim faith and then listen to a young man whose rejection of his father's values reminds him of his attitude towards his own father. Nādir comforts him by telling him the fable of the City of the Blind, where few can see the truth, but also counsels him to respect his father's views as a community leader, which the young man appears to accept.¹¹⁸⁵

At-Ṭūfān al-Azraq (The Blue Flood) is a young man's sexual and spiritual *bildungsroman*, as well as a classic cautionary tale about the dangers of scientific over-reaching, and of the would-be worldly ingénue's return to God. From the moment when the supercomputer SANCTUARY is figured as an alternative god, the narrative foreshadowing is in place for its destruction and Nādir's return to true faith in God; the scientists of Jebel Judi tell Nādir that an old computer at a university was once programmed to answer the question 'Is there a God?' "All the lights shone on the machine, and they heard a strange voice coming from its depths. A few seconds later the answer came out and it was Yes, now it does!"¹¹⁸⁶

SANCTUARY rejects the world's faiths as merely historical phenomena that will die out as paganism did, and in the new civilisation after the Blue Flood: "There would be no place left for the pagan levels or belief in the supernatural or strange things, except for what is necessary to experiment and mature."¹¹⁸⁷

فلن يكون هناك مجال لبقائه في مستوى الوثنية أو الإيمان و الخوارق و الغيبيات إلا ما يكفي لتجربته و نضجه.

Nādir's attendant Carol tells him that they celebrate only a spring Eid at Jebel Judi, that does not represent any religion or belief ("لا ترمز إلى دين و لا مذهب").¹¹⁸⁸ Yet after SANCTUARY's death, his programmers dress in white and chant to his statue, and try to kill Nādir, who was responsible for its destruction.¹¹⁸⁹ He then has to flee from these angry acolytes, who call him a 'heretic' ("هرطيق"), and an atheist ("أيها الملحد").¹¹⁹⁰ The scientists, supposedly

¹¹⁸⁵ Ibid., p. 52.

¹¹⁸⁶ Ibid., p. 102: "...و لمعت الأضواء بجميع الألوان على الآلة، و سمعت من جوفها أصوات غريبة، و بعد ثوان خرج الجواب فكان: نعم، الآن!"

¹¹⁸⁷ Ibid., pp. 110 – 111.

¹¹⁸⁸ Ibid., p. 125.

¹¹⁸⁹ Ibid., pp. 146 – 147.

¹¹⁹⁰ Ibid., p. 147.

champions of rationalism, are reduced by the killing of their 'god' to behaving like primitive savages.

At the end, Nādir returns to faith in God; chased by the torch-bearing mob, he calls upon Allah to save him, and a helicopter immediately appears to rescue him (SANCTUARY drowns most of the rebels using the rising lake water in a real 'blue flood'). His only disappointment is that it is that the spirit of the recently deceased Tāj has found a new home in the pale body of Carol, a Western woman to whom he is not greatly attracted (prompting agonising from Nādir as to whether such a body swap is lawful (*شرعية*)).¹¹⁹¹

Religion does not appear to be practised in the world of Mūsa's *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), but during the pivotal public debate in the Hanging Hall. the hero Homo stumbles upon a 'Temple of the Electronic Minds' (*معبد...حيث تضم العقل* "معبد...حيث تضم العقل"),¹¹⁹² As he wrestles with his decision of whether or not to follow the rebel Barūf and leave the glass-domed zones for the dangerous 'real' outside world, he and enters into a dialogue with its guardian mind:

I want to know who I am in this universe that I belong to....and what is the path that I must follow?

The iron mind replied, its lights flashing rapidly, cool and confident again:

You are the man who killed your brother Abel, Homo...

You ruined your father until his mind was lost....

You buried your sister who died in the sands of the desert when giving birth...

And now you have forgotten all your past sins!

Homo cried out in his helplessness, why am I defined like this?

The mind replied, you are not just an individual, Homo. You never were.¹¹⁹³

أريد أن أعرف من أنا في هذا الكون الذى ننتمى اليه...و ما هو الطريق الذى يجب على أن أسلكه...؟

¹¹⁹¹ Ibid., p. 154.

¹¹⁹² Šabry Mūsa, *Al-Sayyid min Ḥaql al-Sabānikh* (Cairo: Al-Hay'a al-Miṣriyya al-ʿĀmma lil-Kitāb, 1987 first published 1982), p. 185.

¹¹⁹³ Ibid., pp. 186 – 187.

و أجاب العقل الحديدي الملون الأضواء بسرية, بسرية, في برود وثيقة أيضاً:

أنت الذى قتلت أخك هابيل يا هومو...

وخنت أبيك حتى ضيعت عقله...

ودفنت أختك موودة في رمال الصحراء وهي وليدة...

وقد أن الألوان الآن للتكفير عن كل خطاياك القديمة...

وصرخ هومو في اعياء:

لماذا أنا بالتحديد... لماذا أنا...؟

وأجاب العقل:

أنت لست فرداً يا هومو... ولم أبداً فرداً...؟

The machine occupies a something like a secular yet priestly position, advising Homo and contextualising his human struggle within the Semitic traditional account of the origins of the fall of man, but presenting this Semitic tradition as fundamentally untrue, a fable made by men as part of their inexorable development from monkey to angelic mind. The novel's attitude towards any religious faith is the most starkly dismissive of all the texts considered here; even *Min mufakkirat Rajul lam Yūlad* (From the Diary of a Man Not Yet Born), which presents extremism as an embarrassing relic from the ancient past, or *Ūtūbiā* (Utopia), in which religious practice is derided as a comfort for the elderly and conservative, are not so dismissive of religion. *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field) differs significantly from the other texts in this respect in its cavalier lack of respect for Islam. It is not just not the work of a confused proselyte like Mahmoud, or a patriotic one like Farouk, or an engaged social commentator such as Ahmed Khaled Towfik; Mūsa's fictional world is simply post-religious, with traditional religion conspicuous by its absence, although there are echoes of it in daily life and in David and Homo's angel/monkey conversations. Religion is simply defunct in the face of a new technological magisterium, the total surveillance society, its enjoyments and pleasures so carefully controlled and calibrated, that its rulers have created.

6.5 Angels and Demons

The traditional non-divine spirit-beings of the Semitic world, angels and demons, appear frequently in the *Milaff*, whether the angels of the Abrahamic faiths, or pseudo-angels that turn out to be aliens, and appear briefly in the other texts, a position that places them also

within the ambit of the supernatural, non-canonical literature of the angels, demons and vampires of supernaturalist, occult or horror fiction.

In No. 48 *Sijn Al-Qamr* (Moon Prison), the team discover a civilisation of winged humanoid beings living in the interior of the Moon. We are invited to consider the existence of these aliens to be actual angels, rather than aliens whose visits were the origin of belief in angels on Earth (as they turn out to be), but Nūr denies this, saying that these aliens cannot be real angels because they are not made from light.¹¹⁹⁴ In the *Milaff* world, both angels and aliens exist, but they are separate created beings.

They meet the angel Van again on the Moon in No. 86 *Al-Imbirātūr* (The Emperor). Ramzy sees Van and immediately assumes that he is a Djinn, but Van smiles and says that the Djinn are more wonderful than anything else that the Creator has made, but that what he sees was made by mortal beings.¹¹⁹⁵

Demon possession occurs in the later books, and can be presented either as fake, for example in a plot twist where the ‘possession’ is revealed to be the influence of aliens, as in No. 68 *‘Uqūl Al-Sharr* (Evil Minds) when intelligence officer Izzat Mokhtar declares that he does not believe Hassan to be possessed, saying that this is ‘something out of the Middle Ages’,¹¹⁹⁶ and as a reality, the fullest treatment of this being found in No. 74 *Al-Şirā’ Al-Jahannamī* (Hellish Struggle). This book opens with a possessed Nashwa wielding a demonic sword against Nūr, which Farouk explains with a flashback to the appearance of the first human beings on earth, when evil found its way into the hearts of Cain and Abel, and Satan married one of the daughters of Eve and produced a child (confusingly at this point Farouk adds that “Satan became Set, who became Rasputin”, and tells us that Nūr is the ‘descendant of Osiris’).¹¹⁹⁷

Nūr and Dr Hījāzi arrange a séance (“جلسة لحضير الأرواح”) that fails when a black being devours the spirit they have called up. They consult the Middle East’s experts on supernatural matters, in particular Dr Aziz, who has a small flask full of Zamzam water, with

¹¹⁹⁴ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison), pp. 95 - 96; the aliens tell Nūr how they built a spaceship and landed on Earth not long before the birth of Christ, and men believed they were the angels of their faith.

¹¹⁹⁵ Farouk, No. 86 *Al-Imbirātūr* (The Emperor), p. 110.

¹¹⁹⁶ Farouk, No. 68 *‘Uqūl Al-Sharr* (Evil Minds), p. 70.

¹¹⁹⁷ Farouk, No. 74 *Al-Şirā’ Al-Jahannamī* (The Hellish Struggle), p. 8.

which Nūr has to inject Nashwa before dawn.¹¹⁹⁸ The decision to effectively engage in witchcraft, even *shirk*-like practice linked with Islam via the Zamzam water, is puzzling, given the team’s usual reliance on prayer to Allah, but only the villain Safwat actively tries to summon the demon responsible for Nashwa’s condition using traditional occult means, lighting candles and reading an inscription from a magical disk to do so (although the demon that appears immediately kills him).¹¹⁹⁹

The demon’s subsequent appearance and manifestation through a mirror is remarked upon by Maḥmūd as “breaking all scientific laws”,¹²⁰⁰ and they discuss what kind of being it could be, settling upon half-human, half-demon. Dr Aziz corrects Nūr, saying that the creature is a *Kāfir* (a denier or idolator), but not a *Mulhid* (atheist). He then explains that the demon cannot be an atheist, because he and Allah are engaged in a perpetual struggle, framing this as “the only logical explanation given what they have seen”.¹²⁰¹

From this point on, the genre appears to switch from SF to fantasy horror, as blood pours from the walls and skeleton warriors and monsters appear, although in No. 80 *Al-Naṣr* (Victory), the demon appears again as the emperor of Jalūrīāl, identifying himself as “the son of Satan, or Beelzebub, or Lucifer”, who had been imprisoned again in the inscribed disk by Nūr, found and stored by the Arghurānians, then seized by the Jalūrīālans and accidentally freed. The demon’s actual provenance – spiritual being or alien – is not ultimately made clear, but the Occupation that forms a quartet in the series is revealed to be ultimately motivated by the demon’s wish for revenge on Nūr. Whatever its origin, the demon appears to be ultimately susceptible to physical destruction by fire; in No. 83 *Arḍ Al-‘Ādam* (The Non-Existent World), S-18 kills it by throwing the disk into the sun.

Farouk also explains the phenomenon of vampires (“مصاص دماء”) as chthonic-demonic in origin, separated from humans only by the eponymous ‘black curtain’ of No. 70 *Al-Sitār Al-Aswad* (The Black Curtain), with their own distinctly Egyptian, rather than Transylvanian, history. Maḥmūd tells them that a tribe called the Mamṣouṣīn (blood-suckers) used to

¹¹⁹⁸ Ibid., p. 10.

¹¹⁹⁹ Ibid., p. 43.

¹²⁰⁰ Ibid., p. 64; Dr Aziz points out that they are speaking of a supernatural being, that does not have to obey scientific laws; it can move freely between worlds like djinn and interact with men, unlike angels, who are only permitted to do so on “specific missions” (p. 65).

¹²⁰¹ Ibid., p. 66.

conduct a ritual called Zār to expel them.¹²⁰² Farouk tells us that the existence of the vampires gave rise to the idea of Satan living underground, and a demon tells Nūr that they have been on Earth for longer than human beings and aim to seize control of the earth.¹²⁰³

The Zār also appear in No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil) during a debate among the team about whether or not demon possession is real. Ramzy says that such beliefs exist everywhere and in every time – the ancient Egyptians, Romans, Byzantines, Hindus and Aboriginal Australians, and “even in modern Egypt the Zār still believe in this.”¹²⁰⁴ This statement has a faux-anthropological tone, with the mentioning of the Zār as ‘Egyptian’ bringing the reality closer to home, but avoiding further discussion on whether or not the phenomenon is a spiritual reality.

Dr Hijāzi’s use of an electrical current to reverse the vampirification process (contact with the apparently supernatural creatures causes humans to morph into them) is typical of Farouk’s ludic tendency to blur the lines between magic and science.

The word *wathnī* (pagan) is rarely used in the series, although in No. 40 *‘Alāmāt Al-Khawf* (Signs of Fear), Nūr and Salwa’s investigation of what is eventually revealed to be a ruse by a human cult leader leads them to study the history of Satan-worship, which they find “took place in ancient Greece, Rome and in America in the second half of the 20th century,” with Nūr adding that it is “similar to paganism, which is not common in the Middle East”.¹²⁰⁵ Farouk is thereby able to make use of the horror and fascination elements of witchcraft in his narrative, while at the same time primly asserting that this practice has little place in the Arab world (and implying that it is prominent in contemporary America, a trope popular with conspiracy theorists). Nūr’s choice of words when he arrests the businessman masquerading as a demon is religious in tone; he calls him a “الوغد الزنديق”, a wretched heretic.¹²⁰⁶

Actual discussions about religion are not a common occurrence in the series, but in No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), during a discussion about the curse of the Pharaohs,

¹²⁰² Farouk, No. 70 *Al-Sitār Al-Aswad* (The Black Curtain), p. 49. For an account of Zār, a real ritual, see Janice Boddy, *Wombs and Alien Spirits: Women, Men and the Zār Cult in Northern Sudan* (Madison, Wisconsin: University of Wisconsin Press, 1984), pp. 125 – 165.

¹²⁰³ Ibid., p. 96.

¹²⁰⁴ Farouk, No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), p. 67.

¹²⁰⁵ Farouk, No. 40 *‘Alāmāt Al-Khawf* (Signs of Fear), p. 30.

¹²⁰⁶ Ibid., p. 70.

Nūr engages in a gentle Islamic catechism with the archaeologist Dr Moustafa, following her declaration that she was inclined to believe that a Pharaonic curse was caused the death of the journalist Tawfiq. Nūr asks her if she believes in Allah. She says yes, of course, did he think she was an atheist? Nūr then asks if she believes that Allah is one and he is not divided? She hesitates, then says yes, but that she believes that Set and Isis and their like are not gods in the true sense, but advanced scientists who may have appeared to be gods to the ancient Egyptians, using microbes and rays, who knows?¹²⁰⁷ Later, when another character is fretting about becoming the curse's next victim, Nūr angrily tells him to stop this pagan thinking, and that the only God in their Sharia is Allah.¹²⁰⁸

لا يوجد في شرعنا إلا إله واحد , هو الله (سبحانه ونعالى) , وكل ما عدا ذلك هراء ... و سوسة شيطانية.

The team later re-iterate their belief that Satan-worship (“عبادة الشيطان”) only exists in the West.¹²⁰⁹

Angels also make an appearance in Mahmoud's *Rajul taht al-Ṣifr* (Man Below Zero), when we see the disembodied Shāhīn discover beings in space, “creatures, beings with features, forms and personality”, as well as Allah himself.¹²¹⁰

مخلوقات و كائنات ذات ملامح و تقاطيع و شخصية

The world of *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field) figures angels as an intellectual embodiment of man's ascendancy from brute beast; the text is friendly to Darwinism, with regular riffs on the journey from ‘monkey to angel’, when Homo is relaxing during a break from his first interrogation, and when he is discussing human progress with his friend David.¹²¹¹ God is not mentioned at all. For Homo, it is man who has grown wings to fly to distant planets, but David reminds him that “Man hangs there by his mind, and makes the wings with his mind” (“ان الانسان يخلق بعقله, و بعقله يصنع الأجنحة...”).¹²¹² Homo's response is

¹²⁰⁷ Farouk, No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), p. 22.

¹²⁰⁸ Ibid., p. 44.

¹²⁰⁹ Ibid., p. 63.

¹²¹⁰ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero), p. 80.

¹²¹¹ Mūsa, *Al-Sayyid*, p. 84, p. 111, p. 114.

¹²¹² Ibid.

that the angel is not just a flying being, but ‘Thought’ (“فكرة”), adding that they can still communicate with men in dreams to raise their spiritual (“روحي”) awareness¹²¹³.

The discussion with David continues, but the subject is man’s departure from physical nature (being their separation from the outside world by the glass domes) and the spirit of adventure and exploration, rather than a departure from any particular set of spiritual or religious values. Homo is shocked that man is able to manufacture other human beings artificially, but this shock is not explained on ethical or religious grounds – it is presented as a disgust-response to the artificiality of the world, and Homo’s longing to return to nature – in this case, to the world outside the glass domes – is not couched in religious terms.

Homo’s closest encounter with religion in his world is his accidental wandering into the Temple of the Electronic Minds in the Hanging Hall, where glowing banks of computers can answer any question. In this world, the only source of spiritual advice is the god-like or sacerdotal presence of an omniscient electronic brain. As discussed in Chapter 4.2, these minds expound the history of the human race to Homo, in terms of geological development and evolution, but Homo, although he pleads for them for advice on how to solve his dilemma, symbolically sleeps through this exegesis, as his decision is driven by emotion rather than reason.

In Mahmoud’s *Al-‘Ankabūt* (The Spider), the protagonist Dāūd speculates on the mystery of the pineal gland and the likelihood of the villain Damiān having isolated an elixir from it. During this reverie, he likens the human condition in relation to the spiritual dimension to a blind worm that has only the rudiments of sight and hearing in its primitive nervous system; how would it feel if it knew one day that its descendants would have eyes and ears? It would think this was a miracle and would not believe it.¹²¹⁴ The analogy is thoroughly Darwinian, but the sentiment in context is entirely mystical.

¹²¹³ Ibid.

¹²¹⁴ Moustafa Mahmoud, *Al-‘Ankabūt* (The Spider) (Fifth Edition), (Cairo: Dār Al-M’ārif, 1989), p. 67.

6.6 Moral Behaviour: Violent Acts

Besides examining how religious practice is presented in the texts, it is also worth considering how conflict is approached ethically in the texts, in particular with regard to Farouk's handling of violent conflict by a team who are avowedly devout Muslims.

Violent acts feature in every *Milaff* book, which is of interest in terms of how these acts fit in with the religious beliefs and world-view of the team. Farouk faces the challenge of not glorifying violence for his young readership, while at the same time seeking to entertain them with at least one fist-fight, or laser-gun battle (which typically fill a whole chapter in every book). The team does commit violent acts against villains (and suffer reciprocal violent acts), but these must be explained, so we find Farouk often adding a justification, or expressions of regret. Accordingly, we are repeatedly told that Nūr hates violence and killing; for example, in No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), Nūr is furious when the villain Midhat shoots his colleague:¹²¹⁵

كان جسد (نور) كله يرتعد من شدة الغضب , لأنه كان يكره القتل و الدمار ...

In No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), we are reminded that Nūr hates violence, although he works in a violent profession:¹²¹⁶

كان حديث الدمار يثير في نفسه شعورًا بالاشمئزاز و الضيق... كان يكره العنف إلى درجة شديدة برغم أنه يعمل في مهنة عنيفة ...

In No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), we are told that his nature is to hate violence and killing:¹²¹⁷ “طبيعته تكره العنف و القتل”, and these words, or close variations thereof, are frequently repeated throughout the series, far more often than the other formulaic expressions often used in the series (there is much knitting of brows, and bursting into tears, to signify emotion).

¹²¹⁵ Farouk, No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future), p. 84.

¹²¹⁶ Farouk, No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor), p. 11.

¹²¹⁷ Farouk, No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), p. 64

No. 30 *Al-Nār Al-Bārīda* (The Cold Fire), we are reminded of this hatred;¹²¹⁸ in No. 37 *Al-Samā' Al-Muḥlāma* (Dark Sky) Nūr is “not inclined towards killing and violence”¹²¹⁹ (but then kills to save Maḥmūd), and again in the sequel No. 38 *Min Warā' Al-Nujūm* (From Behind the Stars), that he hates killing and violence, but has to act in self-defence,¹²²⁰ and “for his life, for Salwa, against Satan” in No. 40 *'Alāmāt Al-Khawf* (Signs of Fear).¹²²¹ In No. 81 *Ramz Al-Qūwwah* (Symbol of Strength) he “hates killing and violence”,¹²²² and Salwa recalls in No. 80 *Al-Naṣr* (Victory) how Nūr hated killing and violence, except in time of great need.¹²²³ In No. 69 *Al-'ālam Al-Akhar* (The Other World), he chooses to aim his gun at the arms and legs of the guards attacking him, “not wishing to kill them as he hates violence”¹²²⁴.

Nūr does declare that he is opposed to torture; in No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), he is in the cells of the Qena intelligence centre, interrogating a sleep-deprived prisoner who begs Nūr to let him sleep. Nūr tells him that they are not in a Nazi camp now, but in Egypt,¹²²⁵ implying that the Egyptian security forces do not use torture (despite the fact that they have deprived the prisoner of sleep). In No. 48 *Sijn Al-Qamr* (Moon Prison) when the Russian Vassiliev says that he will use torture, saying that he prefers ‘the old methods’, Nūr speaks out strongly against this, and Ramzy quotes Machiavelli, whose condoning of torture is then condemned.¹²²⁶

Farouk feels obliged to inform his young readership that even necessary violence has adverse consequences, or is careful to show that when Nūr acts violently to take life, he has no other choice. Following the violent fight that ends No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), Nūr actually suffers a nervous breakdown, a theme that recurs in the series after particularly violent events. Having been forced to shoot the villain in the head, Nūr’s eyes are full of tears. Although they have won, he tells Ramzy that he does not feel proud.¹²²⁷

¹²¹⁸ Farouk, No. 30 *Al-Nār Al-Bārīda* (The Cold Fire), pp. 61 - 62.

¹²¹⁹ Farouk, No. 37 *Al-Samā' Al-Muḥlāma* (Dark Sky), p. 71.

¹²²⁰ Farouk, No. 38 *Min Warā' Al-Nujūm* (From Behind the Stars), pp. 21-23.

¹²²¹ Farouk, No. 40 *'Alāmāt Al-Khawf* (Signs of Fear), p. 77.

¹²²² Farouk, No. 81 *Ramz Al-Qūwwah* (Symbol of Strength), p. 51.

¹²²³ Farouk, No. 80 *Al-Naṣr* (Victory), p. 46.

¹²²⁴ Farouk, No. 69 *Al-'ālam Al-Akhar* (The Other World), p. 71.

¹²²⁵ Farouk, No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), p. 30.

¹²²⁶ Farouk, No. 48 *Sijn Al-Qamr* (Moon Prison), p. 34.

¹²²⁷ Farouk, No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries), p. 113.

However, the level of violence increases noticeably as the series progress; there are less straightforward shootings or laser zappings, and more incidences of very violent and disturbing modes of execution. In No. 24 *Al-Ḍaw' Al-Aswad* (The Black Light), Nūr and a colleague threaten a holiday club owner, Nadir, whom they believe has kidnapped Ramzy. Nūr says that they are not following the law, and that they will kill Nadir if he doesn't tell them where Ramzy is. Yet at the end, Nūr chooses not to shoot the villain Dr Hassan because it would be against his principles, and even tries to rescue him from the exploding laboratory.¹²²⁸ Nūr becomes more violent in No. 39 *Al-Thulūj Al-Sākhina* (Hot Ice), so much so that he wonders at his own capacity for violence as he knocks out the two guards in the communications room, but then quickly dismisses this from his mind,¹²²⁹ and in No. 50 *Al-Uṣṭūra* (The Myth) “all of Nūr's hatred of killing evaporates” as he fires his laser gun at a fanged mermaid on the planet Tithonus.¹²³⁰

By No. 86 *Al-Imbirātūr* (The Emperor) Nūr tells the American spy Murphy that he used to hate killing and destruction but has now realised that some people deserve to be killed without mercy. This bleak sentiment is somewhat softened by Nūr's declared wish not only for revenge, but also justice,¹²³¹ but the end of this book takes a dark turn; Nūr shuts Murphy in a pressurised chamber and turns it on, causing Murphy's body to explode. Nūr almost gloats before this gruesome killing, as Murphy pleads for his life, behaviour that seems to be completely at odds with Nūr's previous characterisation.¹²³² In No. 96 *Budhūr Al-Sharr* (Seeds of Evil) Nūr tells the magician-villain Shayan that all his life he has hated violence, destruction and killing, yet despite this he will shoot him and crush his head like an egg if he does not tell him how to stop the Triffid-like Plantourian plants overrunning the Earth.¹²³³

In No. 81 *Ramz Al-Qūwwah* (Symbol of Strength), Farouk introduces a new character, Akram, a geologist and street-fighter, and a trigger-happy proxy to whom the more extreme violent acts can be delegated without further tarnishing Nūr's status as hero and moral exemplar. Akram's debut sees him throwing food to the savages that have overrun Cairo, before setting fire to them. Nūr is horrified by this crime, but even Ramzy says it is justified in the face of their savagery, whereupon Nūr reverts to his former position that killing must

¹²²⁸ Farouk, No. 24 *Al-Ḍaw' Al-Aswad* (The Black Light), p. 106.

¹²²⁹ Farouk, No. 39 *Al-Thulūj Al-Sākhina* (Hot Ice), p. 69.

¹²³⁰ Farouk, No. 50 *Al-Uṣṭūra* (The Myth), p. 84.

¹²³¹ Farouk, No. 86 *Al-Imbirātūr* (The Emperor), p. 105.

¹²³² Farouk, No. 86 *Al-Imbirātūr* (The Emperor), pp. 112 – 114.

¹²³³ Farouk, No. 96 *Budhūr Al-Sharr* (Seeds of Evil), p. 59.

only be done in case of dire necessity.¹²³⁴ In the sequel, when Akram starts shooting to rescue the team, Ramzy tells Akram that he would have preferred death to rescue at this price.¹²³⁵

Akram does not learn, like Nūr; in No. 83 *Arḍ Al-ʿĀdam* (Non-Existent World), he tells the villain Ralf that he has put an explosive disk in his suit, and detonates it, turning him into a “pile of minced meat” (“كومة من اللحم المفري”) inside the suit. Ramzy says it was an ugly death, but Moushira says they owe their lives to him.¹²³⁶ In No. 146 *Al-Buqʿa Al Muḥluma* (The Dark Spot), Akram soliloquizes about how, in a world ruled by science he, a relative savage, prefers the old methods,¹²³⁷ and later tells the monster they have been hunting that he, the savage, understands him better than the men of science.¹²³⁸

The *Milaff* are short, plot-driven narratives, with characterisation remaining mostly static and largely undeveloped, and with hurried pairings-off into marriage their only apparent rite of passage, but Nūr’s increasingly violent characterisation is a troubling anomaly. This changing attitude towards violence may be a response to the wishes of the readership, or a deliberate attempt to shock, but it could also be a genuine exposition of how repeated violent behaviour changes the character and personality.

Violence is also nearly always performed by men; in No. 80 *Al-Naṣr* (Victory), Nashwa cries, may Allah curse all wars,¹²³⁹ and Salwa tries to comfort her by saying that giving one’s life for the struggle is worth it,¹²⁴⁰ which is of particular note, as various team members, and S-18, do perform potentially suicidal acts to save others in the series, including disappearing into other dimensions; as such sacrifices have a purpose, they are deemed to be worthy. At the end of No. 83 *Arḍ Al-ʿĀdam* (Non-Existent World), when Akram is trying to comfort Nūr for the loss of his friend the robot S-18, who has blown himself up with the evil disk to save mankind, he justifies his action as one of the casualties and sacrifices of war, and Nūr says that the most important thing is that his sacrifice bears fruit (in this case, they are now able to

¹²³⁴ Farouk, No. 81 *Ramz Al-Qūwwah* (Symbol of Strength), p. 94.

¹²³⁵ Farouk, No. 82 *Ḥuṣn Al-Ashrār* (Fortress of Evil), p. 26.

¹²³⁶ Farouk, No. 83 *Arḍ Al-ʿĀdam* (The Non-Existent World), p. 106.

¹²³⁷ Farouk, No. 146 *Al-Buqʿa Al Muḥluma* (The Dark Spot), p. 107.

¹²³⁸ *Ibid.*, p. 133.

¹²³⁹ Farouk, No. 80 *Al-Naṣr* (Victory), p. 26.

¹²⁴⁰ *Ibid.*, p. 27.

rebuild civilisation on Earth).¹²⁴¹ It is hard not to read this as a cautious endorsement of suicide bombing.

The theme of suicide as morally equivocal is also treated in Mahmoud's *Rajul taht al-Şifr* (Man Below Zero). The irreversibility of Dr Shāhīn's transformation from corporeal into incorporeal 'wave' form disturbs his boss Ocampo, who says that conducting this experiment upon oneself, as Shāhīn plans to do, is suicide, which is criminal ("انتحار... جريمة...").¹²⁴² Later, when his assistant 'Abd Al-Karīm's treachery is revealed, 'Abd Al-Karīm tries to make amends by agreeing to a mission to Jupiter in suspended animation that is essentially suicidal. Shāhīn berates his assistant for his horror of death, saying that he has read too much Byron and criticising 'Abd Al-Karīm's world-view as 'Romantic' (just after 'Abd Al-Karīm has gloomily declared death to be a welcome release, following his rejection by Rosita), and advising him to take a dose of Sa'ādūl before bed.¹²⁴³

This moral debate has resonance from the first chapter of the novel, when Shāhīn is giving the lecture that tells the reader about the state of the modern world. After telling the students about the pioneering of test tube babies and genetic engineering, a student challenges him from the audience about human interference in nature, which Shāhīn defends on the grounds that humans are the only rational beings that have the ability to intervene in the blind circumstances brought about by nature. He invokes Kantian rationalism – the ability, whether willed or not, to act – giving as proof the fact that a person can choose to commit suicide.¹²⁴⁴

”هذه فلسفة كانتية... الإنسان يحكم على كل شيء... أراد أو لم يريد... الدليل على ذلك أنك يمكن أن تنتحر“.

Even in an apparent Utopia of abundance and peace, moral dilemmas persist, and, while knowledge and invention are valuable, human love is the only reliable constant that gives ultimate value to life; without this, the scientist anti-hero literally fades away into nothing. The moral issue of suicide in this novel is resolved by condemnation in the case of Shāhīn, but acceptance in the case of the villain 'Abd Al-Karīm.

¹²⁴¹ Farouk, No. 83 *Arḍ Al- 'Ādam* (Non-Existent World), p. 143.

¹²⁴² Mahmoud, *Rajul taht al-Şifr* (Man Below Zero), p. 56.

¹²⁴³ Ibid., p. 47.

¹²⁴⁴ Ibid, p. 27.

In *Ūtūbiā* (Utopia) the anti-hero's fascination with death is framed as the result of anomie arising from the excesses of a pleasure-oriented futuristic Egyptian elite; the novel opens with the nameless anti-hero enviously contemplating a poster for the 1986 Vietnam war film *Platoon* depicting the death of the character played by Willem Dafoe. Death is an adventure, "the great game we haven't yet played" ("الموت... اللعبة العظمى التي لم نجربها بعد...").¹²⁴⁵ Despite his boredom with his life of abundance and pleasure, the listless teenage anti-hero does not consider suicide because it is "vulgar" ("بلدي"), something he associates with the wretched lives of the poor.¹²⁴⁶

In *At-Ṭūfān al-Azraq* (The Blue Flood), Nādir's book *The Age of Man* suggests that the desire of the spirit to break free from the body's prison ("أسر البدن") is what pushed many philosophers towards suicide; this is significant, because escape and sexual freedom is one of the novel's major themes.¹²⁴⁷ At the end, Nādir uses the ruse of pretending suicidal desire in order to explore the world beyond, in order to tempt the half-humanised supercomputer SANCTUARY to shut itself down, but chooses life himself, a choice that results in his 'return' to an English hospital where he wakes up to the possibility that he may have been dreaming (although in the dream he has resolved his previous sexual difficulties).

6.7 Magical Thinking: *Shirk* and the Supernatural

Two of the authors considered here draw heavily upon the heterodox-supernatural in their work: Mahmoud, because of his well-documented interest in Buddhism and Eastern beliefs in reincarnation, and Farouk because of his preference for mystery (both maintained and debunked). Both authors pay respect to and accord ultimate authority to Allah, but their texts are suffused with the fantastical, not outright fantasies of dragons and magic, but flirtations with supernatural elements of folk-belief and paganism.

Reincarnation and disembodied immortality – the reality of a spiritual essence existing independently of the corporeal – are persistent themes in all three of Mahmoud's three SF/SF-inflected novels. *Al-'Ankabūt* (The Spider) is a fable that frames the price of immortality as reincarnation in ever less sentient forms. The hero Dāūd finds himself under

¹²⁴⁵ Towfik, *Ūtūbiyā* (Utopia), p. 11; English version, p.5.

¹²⁴⁶ Ibid., p. 27; English version, p. 20).

¹²⁴⁷ Al-Baqqāli, *At-Ṭūfān al-Azraq* (The Blue Flood), p. 78.

the influence of the pineal gland elixir, regressing to life as a human slave, as an ox, and finally as a tree in a primeval forest. This novel could perhaps more accurately be described as Gothic horror than SF, although the physical apparatus of science and the narrator's profession, which provide the basic scaffolding for the human drama, position the text roughly within the popularly-conceived SF ambit. In Riḍwān's biography of Mahmoud, guest contributor Dr Yūsuf Nūfal addresses Mahmoud's credentials as an SF author, commenting that he "sometimes veers close to fantasy, magical realism, or science fiction as in *The Spider*", suggesting a direct line of inspiration from Verne to Mahmoud.¹²⁴⁸

Science has a supporting, not a starring, role in this novel. The reader is invited to respect Dāūd's qualification – interestingly, his *Western* qualification – as a neurosurgeon, and therefore believe him to be a reliable, rational narrator. Notwithstanding this scientific apparatus, the driving force of the narrative is really the magical power of a drug made out of ingredients that one would more commonly associate with medieval alchemy or witchcraft, its notional efficacy based on a vitalist theory of 'life force' and the popular belief that the pineal gland is the seat of the spirit.¹²⁴⁹ Its effects are magical too, creating what we are invited to believe is a reality, not an illusion, of the reiteration of past lives.

Dreams drive the final pages of the plot in Mahmoud's *Al-Khurūj min al-tābūt* (Rising from the Coffin), when Imhotep appears to the hero Tawfīq in a dream to tell him that the Brahma, the Indian fakir whom he met in India and who has just died, was a reincarnation of Imhotep, and also of an ancient priest, Nun Mahab. He tells Tawfīq where to find the lost sarcophagus of Khufu, leading him to ascend the Great Pyramid in real life, almost falling to his death in the process, but coming to realise at the end that death is nothing to fear because of the reality of reincarnation.

Outright belief in an unexplained but real supernatural is at its most explicit in this novel; the hero Tawfīq, an Egyptian archaeologist on holiday in Delhi, sees a beggar levitating; although he thinks that is must be naiveté ("شعوذة") on his part, he believes the feat to be supernatural. His Muslim guide is sceptical, speaking scornfully of 'our brothers the

¹²⁴⁸ Riḍwān, *Mahmūd.*, pp. 136 - 137.

¹²⁴⁹ Ada Barbaro finds traces of this tradition in Lovecraft and Philip K. Dick: "Al-'Ankabūt (Il ragno) di Muṣṭafa Maḥmūd: un esempio tra fantascienza e romanzo gotico alla ricerca dell'immortalità," *La rivista di Arablit*, II, 4, 2012, p. 80.

Hindus'. We live in an age of science, he says, yet these men persist in their childishness, their snake-charming and beds of nails.¹²⁵⁰

There is a strong pull towards syncretism throughout; Tawfīq observes the Brahma descend a spiral staircase to the bottom of a well, remaining underwater meditating for nearly an hour before calmly exiting and saying prayers from the Gospels, the Qur'ān, the Psalms and the Buddhist Dhammapada. Omar tells Tawfīq about his time at the Marylebone Spiritual University with the Brahma, and of how their tutor Mrs Mackenzie received a message from Omar's dead father communicated in Sanskrit by automatic writing. He tells Tawfīq that the other world is a place of vibrations, a paradise, and that there is no fiery hell. This world is a copy of ours, as described by Plato.

As *Al-Khurūj min al-tābūt* (Rising from the Coffin) has such a strongly oneiric tone, it is worth briefly considering Maḥmūd's non-fiction work *Al-Ahlām* (Dreams), in which he speaks of dreams as the source of invention, beginning with a brief summary of the theories of Freud, Jung, Fromm and Bergson. He relates a dream that he had after visiting the subterranean tomb of Sayyida Zeinab at Bab el Zuweil; while writing *Lughz al-Mawt* (The Mystery of Death), he dreamed that he was visited by the writer Ibrahim Nagy, the saint Sayyida Hussein and former *Rūz al-Yūsef* editor Salama Musa.¹²⁵¹ It appears that Mahmoud regarded these dreams as genuine visitations by the spirits of the dead, rather than simply as proof that waking preoccupations influence our dreams. The former would not in any case be particularly controversial; dream-interpretation is a common practice in the Islamic world.¹²⁵²

Mahmoud travelled widely, and was well read in Eastern philosophy. It seems likely that *Al-Khurūj min al-tābūt* (Rising from the Coffin) was the fruit of this interest, merged with ancient Egyptian beliefs in order to make it more interesting to an Egyptian readership. The themes of dreams, telepathy and reincarnation take precedence over the sketchy science of waves and particles discussed in the rambling late-night conversation between Tawfīq and Omar Khan. It is unclear if Tawfīq survives his fall from the Great Pyramid (he wakes up in hospital), but if he does not, this may not be a punishment for his longing for esoteric

¹²⁵⁰ Moustafa Mahmoud, *Al-Khurūj min al-tābūt* (Rising from the Coffin) (Cairo: Dār Akhbār Al-Yawm, 2005), pp. 7 – 8.

¹²⁵¹ Moustafa Mahmoud, *Al-Ahlām* (Dreams), (Al-Akhbār Al-Yawm, 2004), p. 44.

¹²⁵² See Iain Edgar, *The Dream in Islam: from Qur'anic tradition to Jihadist Inspiration* (Oxford: Berghahn Books, 2004), p. 2.

knowledge; his demise is softened by his belief that he will be born again. The novel is an Orientalist psi-fantasy through which the author seems to suggest a commonality between Hindu belief in reincarnation and the beliefs of ancient Egypt, perhaps exemplifying his belief that the Arab world has (or should have) a greater affinity to the East rather than to the West.

Talib Omran complained that *Al-Khurūj min al-tābūt* (Rising from the Coffin) was full of metaphysical thoughts, and criticises Mahmoud's lack of understanding of the importance of science, which is far from mysteries and the supernatural:¹²⁵³

...ويستمر الأسلوب المثير الغيبي الممتلئ بالأفكار الميتافيزيقية يتدفق في الرواية مؤكداً نهج مصطفى محمود في عدم فهم مهمة العلم البيدة عن الغيبات و الخرافيات.

He argues that Mahmoud's privileging of metaphysical power over scientific empiricism hinders the spread of scientific thinking which can solve and treat real problems. Omran's criticism is justified; this particular novel does not really belong in the SF canon, because, although science is the subject of discussion, it is not a real facilitator of the plot. However, he viewed *Rajul taht al-Ṣifr* (Man Below Zero) more kindly, on the grounds that it imagined the science of the future, with rockets and a one world order.¹²⁵⁴

The apparent unorthodoxy of a Sunni Muslim believing in reincarnation is tempered by the highly speculative nature of Dāūd's reflection, as he suggests that the ability to see into the future and past would make us "like angels, like prophets".¹²⁵⁵ Such expressions help to set the apparently exotic and heterodox plot safely back within the sphere of orthodox belief, as they suggest that the drug is simply a gateway to the already known religious reality – a physical medium, made from parts of created animals and plants, that allows an ordinary human being the ability to see what God, angels and prophets can already see, although the fate of the protagonists suggests that such an experience is *harām*. Dāūd uses explicitly Semitic religious language, reinforcing this binding of the fantastical to accepted orthodoxy,

¹²⁵³ Talib Omran, *Fī al-'Ilm wa al-Khayāl al-'Ilmī* (Damascus: Syrian Ministry of Culture: 1989), p. 124.

¹²⁵⁴ Ibid., pp. 125 – 126.

¹²⁵⁵ Mahmoud, *Al-'Ankabūt*, p. 68.

when he reflects upon the consequences of eating of the “forbidden tree”. (الشجرة المحرمة).¹²⁵⁶

In Riḍwān’s biography, guest commentator Tharwat Abaza praised Mahmoud for “showing the congruence between science and faith...in everything that he wrote, he tried to show the power of Allah through science...”,¹²⁵⁷ and Riḍwān himself concluded that Mahmoud was “a knight of faith and science”,¹²⁵⁸ saluting his success in bringing about a marriage of the two, and comparing his spiritual journey to that of Al Ghazali.¹²⁵⁹ A closer examination of Mahmoud’s three SF-inflected works would surely have revealed his strong ambivalence about scientific progress, and an unexpected interest in reincarnation and Eastern philosophy reflecting the typical fears of the reactionary Romantic confronted with rationalist Enlightenment thinking.

These slightly aberrant texts preserve a particular spiritual viewpoint that he held during a short period in the early 1960s, one of several different strands of faith to which he was attached in the course of his life; Siddiq refers to Mahmoud as a ‘Marxist turned preacher’, whose work is “far inferior in caliber [sic] and originality” to Sayyid Qutb’s oeuvre.¹²⁶⁰

It seems surprising that an author so revered for his defence of Islam should have written three novels predicated upon pantheism and reincarnation, but this is understandable in the context of the development of his beliefs. Mahmoud was admired to some extent as a prodigal returned, because of his spiritual journey from his childhood Islamic faith, through a period of agnosticism and fascination with Eastern philosophy, back to orthodox Islam later in life. Riḍwān tells us that in later life he credited his frequent ill health with polishing his faith and awakening his faith in Allah,¹²⁶¹ but chose to ascribe Mahmoud’s early near-apostasy to youthful curiosity, stating that he had continued to pray to Allah during his years of doubt.¹²⁶² Khairy Shalaby, however, openly approved of his willingness to discuss and

¹²⁵⁶ Ibid., p. 81.

¹²⁵⁷ Riḍwān, *Maḥmūd*, p. 117.

¹²⁵⁸ Riḍwān, *Maḥmūd*, p. 140.

¹²⁵⁹ Riḍwān, *Maḥmūd*, p. 146.

¹²⁶⁰ Siddiq, *Arab Culture and the Novel*, p. 103.

¹²⁶¹ Riḍwān, *Maḥmūd* p. 92.

¹²⁶² Ibid., p. 30-31.

question religion, charitably recalling him as someone who challenged faith and discussed doubt, “unlike the old litterateurs and *kalām* types of before”.¹²⁶³

The apparent heterodoxy in these three novels is thereby excused as a temporary aberration, or, given Mahmoud’s interest in Sufism, possibly read as bordering on Sufi mysticism and therefore acceptable. All three of his SF heroes are seeking enlightenment, whether immortality through reiteration of past lives in *Al-‘Ankabūt* (The Spider), or the reassurance of reincarnation in *Al-Khurūj min al-tābūt* (Rising from the Coffin), or the bodiless immortality of *Rajul taht al-Ṣifr* (Man Below Zero), but they are seeking it via pseudo-scientific means - through a drug, or in dreams, or by teleportation. In the latter, God is seen by Shāhīn as he travels towards the sun, but elsewhere in these novels monotheism is largely absent, and the reader is invited to accept the reality of reincarnation, rather than one life followed by divine judgment.

Although Dr Dāūd in *Rajul taht al-Ṣifr* (The Spider) and Brahma Wagisoara in *Al-Khurūj min al-tābūt* (Rising from the Coffin) both have qualifications from Western institutions (Berlin and Oxford universities respectively), and these are clearly intended to impress the reader and make him trust them as guardians of truth about the ultimate nature of reality, the heritage of Western rationalist, materialist Enlightenment thought is rejected in the novels in favour of a supernatural Eastern spiritual world of multiple past lives. Mahmoud in both these fiction texts and his non-fiction works tends to show a worrying lack of a critical faculty with regard to charlatanism; we are told that the Brahma is a member of ‘Marylebone Spiritual University’ as though this implied some sort of academic rigour. In *Qir’āt Lil-Mustaqbal* (Fortune-Telling), Mahmoud discusses Mesmer’s ‘magnetic hypnosis’, theosophy and yoga as mental and physical remedies not fully understood by modern science, without adding any qualification, reservation or serious critical discussion.¹²⁶⁴

Mahmoud’s views on the relationship between faith and science can perhaps best be summarised in the night conversation between Omar Khan and Tawfīq in *Al-Khorūj min al-tābūt* (Rising from the Coffin):-

تذكر أن الدين الحق، لا يناقض العلم، لأن الدين الحق هو منتهى العلم.

¹²⁶³ Ibid., p. 126.

¹²⁶⁴ Mahmoud, *Qir’āt Lil-Mustaqbal* (Reading the Future), p. 57.

“Faith is truth, it does not contradict science; rather, true faith is the highest level of science.”¹²⁶⁵ His assumption is that faith is the ultimate truth, and that the truths of science will always be subordinate to and fit into this superior reality. This insistence on the privileging of the numinous above the technological has the unfortunate effect of reinforcing the Orientalist values lampooned in 1922 by Amin Al-Rayhani: “I am the Orient... I have philosophies; I have religion. Is there anyone who might buy them from me for aircraft?”¹²⁶⁶

Farouk’s use of SF is superficially concerned with logic and scientific deduction, but his handling of religion and the supernatural allow him to opt for different approaches in the *Milaff*, including the debunking of the apparently supernatural with a rational explanation, deliberately maintaining ambiguity, and statements of absolute belief in the supernatural, as well as in Allah.

The recurring motif of the apparently supernatural event being the result of a mundane (usually criminal) plot occurs in No. 27 *Al-Fakhkh Al-Zujājī* (The Glass Trap), a detective novel set in a theatre, where a young actor has apparently been turned into a glass statue by his rival. A supernatural theory is dangled before us when a book on black magic is found at the scene, but the apparent transformation turns out to have been a publicity stunt. Money and power are revealed as the motive behind an apparently supernatural series of crimes in No. 40 *‘Alāmāt Al-Khawf* (Signs of Fear), which opens with an attack on Nūr’s father by Satanic creatures resembling giant bats that have allegedly assassinated local Muslim, Christian and Jewish community leaders. The villain turns out to be a businessman in a plastic mask and bat costume using a voice synthesiser, who has made millions from the ‘slaves of Satan’ tourism trail that sprang up after Nūr’s father destroyed the original cult years before.

¹²⁶⁵ Mahmoud *Al-Khurūj min al-tābūt* (Rising from the Coffin), p. 55.

¹²⁶⁶ Khalid Kishtainy, *Arab Political Humour* (London: Quartet Books, 1985), p. 69. See also Rasheed El-Enany, *Arab Representations of the Occident: East-West encounters in Arabic fiction* (London and New York: Routledge, 2006), on the indivisibility of the conditions for cultural, philosophical and scientific progress, p. 9; also Khalid M. Khalid’s critique of “the idea that the Orient’s *raison d’être* is to be a source of spiritualities”: Khalid M. Khalid, *From Here We Start* (tr. Isma’il R. El Farouki) (Washington, D. C.: American Council of Learned Societies, 1953), p. 42, and Ṭaha Ḥussein, who mocked the concept of the “spiritual East” as “sheer nonsense” that made Egyptians more vulnerable to enslavement: Ṭaha Ḥussein, *The Future of Culture in Egypt*. (tr. Sidney Glazer) (Washington, DC: American Council of Learned Societies, 1944), pp. 21 – 22.

Farouk's use of the popular tropes of the paranormal also see the magical debunked as ultimately susceptible to rationalist explanation. In No. 30 *Al-Nār Al-Bārīda* (The Cold Fire) the supposed spontaneous combustion is revealed to be a cover for a political kidnapping, and in No. 34 *Wahsh Al-Muḥīt* (Sea Monster), where the monster is compared to the Loch Ness Monster,¹²⁶⁷ it is revealed to be an Israeli submarine. This ploy is reversed in No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force), when the alien magician-villain Shayan tells the team the story of the blue-green children who appeared in Spain in 1887, explaining that they were from his planet,¹²⁶⁸ and in No. 28 *Al-Nahr Al-Muqaddas* (The Sacred River), where flying saucers are revealed to be the surveillance devices of an advanced society of ancient Egyptian relicts.

Ambiguity is deliberately preserved in No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow). A straightforward detective story is given a supernatural veneer, as the team go to see a clairvoyant in a Helwan theatre, Surūr Alshaib, "king of the prophets of the twenty-first century, who foretold the New York and London Bridge catastrophes" (this novel was written in the 1980s and the cities were chosen simply as icons of the West).¹²⁶⁹ Nūr opines that fortune-telling is nonsense, but Ramzy says that sometimes precognition exists, remarking that Nūr rejects all supernatural phenomena until the opposite is proved.¹²⁷⁰ He mentions Nostradamus, but Nūr says he has read a lot of his work and some of it is wrong (although a footnote says they are all true).¹²⁷¹ They find the villain using their detective skills, but at the end, the team say that Allah alone is responsible for the wonders of creation, while allowing that Surūr was "the only one in their age who could look into the mirror of the future".¹²⁷²

This ambiguity extends to the nature of Pharaonic magic: at the end of No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), Nūr reminds the team that the Pharaoh's curse, which they had thought explained the disappearance of the rocket, is "a fairytale".¹²⁷³ No. 25 *Šaḥwat Al-Sharr* (Awakening of Evil) begins with archaeologists opening the tomb of Set, and finding what

¹²⁶⁷ Farouk, No. 34 *Wahsh Al-Muḥīt* (Sea Monster), p. 21.

¹²⁶⁸ Farouk, No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force), p. 33. One of many accounts of the myths of green children (in Suffolk and Spain) may be found at <http://perdurabo10.tripod.com/warehousef/id95.html>, accessed 29.2.16. (The most common rational explanation for the children's green-tinged skin is chlorosis caused by malnutrition.)

¹²⁶⁹ Farouk, No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow), p. 5.

¹²⁷⁰ *Ibid.*, p. 6.

¹²⁷¹ *Ibid.*, pp. 27 - 28.

¹²⁷² *Ibid.*, pp. 110 - 111.

¹²⁷³ Farouk, No. 2 *Ikhtifā' Šārūkh* (Vanishing Rocket), p. 115.

Farouk says is a warning similar to that found by Howard Carter and Lord Caernarvon on the tomb of Tutankhamun. As the body count rises due to cobra poison, the team take the rational approach of visiting reptile shops in Cairo until they find one that has recently sold three cobras to a man with a thick moustache and beard. The motive for the murders is revealed to be financial gain; the villain had been offered a million guineas by a tourism company to keep archaeologists away from the tomb.

The plot turns on greed and corruption, rather than the ancient spiritual evil suggested by the title (and cover illustration). Knowledge is the key to solving the mystery, as the villain betrays himself to Nūr by saying that he saw Set with the head of a jackal, when in fact the jackal-headed god in ancient Egyptian mythology is Anubis. Despite this apparently rational resolution, Farouk cannot resist throwing in a supernatural red herring at the end, when the fleeing villain is killed by the door of Horus inexplicably falling upon him, causing Dr Ḥijāzi to comment that this cannot have been an accident.¹²⁷⁴ He hints that the ancient Egyptians may have had supernatural powers, and the reader is invited to consider the death as a divine retribution. Farouk allows Nūr has the last word, telling us that the heavenly faiths refute these pagan Pharaonic gods, and that he believes only in his faith:¹²⁷⁵

إننى أرفض فكرة وجود آلهة فرعونية يا سيدى, فالأديان السماوية تعتبر هذا نوعاً من الوثنية , و انا أومن
بدينى فقط.

The Chief's verdict is every age has its supernatural beliefs, but the important thing is that rationality always destroys these myths:¹²⁷⁶ المهم أن يحطم العقل هذه الخرافات دائماً. Dr Ḥijāzi speculates as to whether the ancient Egyptian gods have some kind of legitimacy as “part of our faith, under different names, such as Satan and the angels? Is Osiris the prophet Īdrīs?”, but Nūr says he still believes that Set is only a personification of evil.

The theology behind the narrative is kept fluid; the ancient Egyptian gods could be prophets under different names, fitting into the Islamic narrative, or they could be explained by modern psychology as personifications of human impulses termed collectively to be ‘evil’, or they could be demons or djinn, which would also fit into Islamic belief and under Qur’ānic

¹²⁷⁴ Farouk, No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil), p. 134.

¹²⁷⁵ Ibid., p. 135.

¹²⁷⁶ Ibid. p. 17.

authority. The questions are put into the mind of the reader, but Farouk does not give them an author's authoritative explanation; as a narrator, not a proselyte, he holds the power by keeping this element of mystery.

In Yusuf Idris' play *Al-Jins ath-Thālath* (The Third Sex), the relationship between the rational and the spiritual world is deliberately presented as ambiguous, and the switch between the real and fantasy worlds intentionally jarring. Dayla Cohen-Mor reminds us that Ataba, a well-known district in central Cairo, is also the Arabic word for threshold, signifying the importance of liminality in the play.¹²⁷⁷ The dreamlike sequence of the journey to the City, the question of how Nāra as She projected her voice, and how Nāra's existence in the real world is reconciled with that of She in the other world are inexplicable, irrational elements, which have the awkward feel of the supernatural patched onto the quotidian. The rational suggestion that Nāra ventriloquized or recorded and played back the voice is not offered, and it is not explained why Ādam continued to hear it in Ataba square. We are invited to believe that the disembodied voice was Nāra's longing projected directly into his consciousness.

What appears to be a drama about science and the human spirit is in fact a fantastical, Arabian-nights inflected tale of a Utopian dream-world through which the protagonist must pass in order to realise the most important truths about his life. It is a thoroughly traditional moral fable with a vaguely scientific setting, with the driving force of the narrative being supernatural rather than rational. It is also a very old-fashioned love story that requires a reluctant hero to be forced to admit to his need for love with an ideal match who has been present from the start, and which requires the almost-sacrifice of the heroine's life to focus his attention. If it carries any message about science, it is a warning, a conservative call for the prioritising of humanist or spiritual values over those of technological advancement.

6.8 Conclusion

Western SF has its own distinct thread of religious discourse, with authors transposing Semitic creation or atonement stories to other planets,¹²⁷⁸ and contemporary American

¹²⁷⁷ Dayla Cohen-Mor, *Yusuf Idris: Changing Visions*, (Potomac, MD: Sheba Press, 1992), p. 90.

¹²⁷⁸ Examples include C. S. Lewis' *Out of the Silent Planet* trilogy, and other Western SF with religious themes, referenced earlier in this Chapter.

Christian fundamentalist literature boasts the *Left Behind* series, an explicitly eschatological speculative account of the ‘Tribulation’ period following the Rapture of the true believers after the Second Coming.¹²⁷⁹

These stories are typically concerned with the human response to the end times; God is not a speaking character. In 2007, William P. Young published *The Shack*,¹²⁸⁰ presented as a Christian spiritual allegory, in which a bereaved protagonist meets God, Jesus and the Holy Spirit, who are incarnated respectively as a cheerful African American woman, a Middle Eastern man and an inscrutable Asian woman (the book provoked controversy in fundamentalist circles for its perceived universalist heresy and alleged promotion of goddess-worship). If the same type of exercise were undertaken by an Arab writer in the current climate, producing a speaking Allah or a speculatively imagined Muhammad, the author would be in credible danger of becoming an assassination target. Literary portrayals of the Prophet are rare and controversial;¹²⁸¹ although it is interesting to note that Pakistani author Javed Akhtar’s controversial “Ultimate Revelations” novel based on the Qur’ān was actively supported by the Sharjah government.¹²⁸²

Arabic SF, as presented in these texts, has a strongly religious ethos, often actively Islamic in character.¹²⁸³ The *Milaff* team pray to and speak respectfully of Allah, and characters quote the Qur’ān, but they do not conduct *da’wah*, or mention Muhammad, observe Ramadan, or speak of giving *zakat* or performing Haj. Faith and reason do not fight because in the *Milaff*

¹²⁷⁹ Series by Tim LaHaye and Jerry B. Jenkins. See the publisher’s website <http://www.leftbehind.com/>. Accessed 29.2.16.

¹²⁸⁰ William Paul Young, *The Shack* (London: Hodder and Stoughton, 2008).

¹²⁸¹ Fictional literary portrayals have rarely gone unpunished, from the 1988 publication of Salman Rushdie’s *Satanic Verses*, resulting in an Iranian fatwa, to the 2005 cartoons published in the Danish newspaper *Jyllen-Posten*, the 2008 attack on the UK publisher of Sherry Jones’ fictional account of the marriage of Aisha to Mohammed, *The Jewel of Medina*; also the 2015 *Charlie Hebdo* attacks in Paris. The 1976 film *Ar-Risāla* (The Messenger) by Muṣṭafa Al-‘Aqād attracted controversy, despite never showing Muhammad on screen, and a more recent Iranian life of Muhammad released in 2015, *Muhammad: Messenger of God*, has received similar reactions:

<http://www.washingtontimes.com/news/2015/mar/25/iran-film-portrays-the-prophet-muhammad-drawing-cr/?page=all>. Accessed 29.2.16. The Dutch-Iranian author Khader Abdolah has recently published an imaginative biography of Mohammed, entitled *The Messenger: A Tale Retold* (World Editions, 2016).

¹²⁸² Khaleej Times, editorial, 04/05/98 at www.angelfire.com/in/revelations/review.html. Accessed 29.2.16.

¹²⁸³ Sharuni says that Sherif, despite the scientific material, wants to draw our attention to the Sharia. Yusuf Al-Sharuni, *Al-Khayāl al-‘Ilmi fī Al-Adab Al-‘Arabī Al-Mu’āsir* (Cairo: General Egyptian Book Organisation 2000), p. 21. He also tells us that in Sherif’s *Sukkān al-‘ālam al-thānī* (Inhabitants of the Second World), mermaids are believers – Muslim, Christian and Jew (p. 38). This echoes ‘Azzām’s survey of the *Thousand and One Nights*’ ‘Sea Cities’ stories, which were inhabited by ‘Muslims, Christians and Jews’: Muḥammad ‘Azzām, *Al-Khayāl al-‘Ilmi fī al-Adab* (Damascus, Dār Ṭalās Lil-Dirāsāt wa al-Tarjama wa al-Nashr: 1994), p. 23.

because there is no incompatibility between them. Both rationalist and religious viewpoints are accommodated, but never drawn into conflict. Farouk is presenting to his readers a worldview in which Islamic faith and a rational/scientific perspective are completely compatible. The agenda appears to be to persuade young readers that an interest in science will not mean separation from or challenges to their individual and communal faith identity.

In *Rajul taht al-Ṣifr* (Man Below Zero), when Rosita is whispering to her friend in the lecture about her love for Shāhīn, she describes him as having “an angelic face, like the prophets” (“ألا يبدو ملائكي الوجه مثل الأنبياء”),¹²⁸⁴ but there is no mention of the Prophet Muhammad in the other texts that are the subject of this study, although a number of characters in the other texts do quote the Qur’ān. *At-Ṭūfān al-Azraq* (The Blue Flood) is notable in this respect as the protagonist Nādir finds himself making a spiritual journey back to faith in Allah, praying and reciting Qur’ānic verses.

Mahmoud’s SF-inflected works, though anchored with references to belief in Allah, have a broader, syncretistic reach beyond traditional Islam. When Shāhīn tells his student audience that they will be turned into dough-like matter after the sun goes out in 13 million years’ time, Rosita challenges him:

Why do you think about the universe’s millions of years, and forget our short lifespan? Let the universe go to hell, as long as there is an atom of love in our hearts...My friends, it is the true atom out of which the whole universe is made.¹²⁸⁵

لماذا تفكرون في ملايين السنين الكونية و تنسون أعماركم القصيرة...فليذهب الكون إلى الجحيم ما دام
في قلوبنا ذرة حب...صديقتي إنها الذرة الحقيقة التي يتألف منها الكون.

Given Rosita’s previous statement that God is love, this statement has overtones of pantheism.

We have seen that religion is not of primary importance in Idris’ *Al-Jins ath-Thālath* (The Third Sex) or al-Quwīrī’s *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born),

¹²⁸⁴ Mahmoud, *Rajul taht al-Ṣifr* (Man Below Zero), p. 34.

¹²⁸⁵ Ibid., pp. 23 - 24.

and in *Ūtūbiā* (Utopia) and *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), it is only a relic, an echo of animal instinct superseded by the development of the human intellect, and a blind alley for humanity: David, the voice of reason in the novel, pulls no punches in condemning the instinct for the supernatural, although of course this does not necessarily represent the author's views, as David appears to disdain the emotions that drove great thinkers and artists:

The human brain developed and established the laws of science, while the instinct remained the same and did not develop. This is how prophetic lore arose, and the great reformers and thinkers and artists went along this human pathway that led nowhere...our ancestors lived at the beginning of the space age, their souls torn between this great scientific progress, and this great moral backwardness...¹²⁸⁶

لقد تطور دماغ الانسان و وضع قوانين العلم، بينما ظلت غرائزة على حالها فلم تتطور، و لهذا فان تعاليم
الأنبياء...و عظماء المصلحين و كبار المفكرين و الفنانين عبر المسيرة البشرية قد ذهبت سدى...و عاش
أسلافنا بدايات عصر الفضاء ممزقى النفوس بين ذلك التقدم العلمى الهائل...و ذلك التخلف الأخلاقى
الهائل...

‘Azzām, writing in 1994, adroitly summarized the central commonality that links all current Arabic SF, namely the moral agenda that pervades every plot: “the literature opposes...science without morals” (العلم بلا اخلا).¹²⁸⁷ This choice of words recalls Sadat’s *akhlāq al-qāriya* (village morality)¹²⁸⁸ a popular political iteration favouring what Jacquemond calls the “‘salvation goods’, such as science, faith and nation” that Sadat wished to control.¹²⁸⁹ Moral behaviour is a major preoccupation in these texts, but actual religious belief and practice is also (mostly) treated with great reverence, or at least caution, as each text was written in a country and during a period where Islamic culture and practice were and still are the dominant magisterium.

Given the controversy that follows public criticism of Islam and the recent censorship issues affecting book fairs in the Middle East, it seems unlikely that any author will risk treating religion as a sociological artefact in the manner of Weber or Durkheim, but equally unlikely

¹²⁸⁶ Mūsa, *Al-Sayyid*, pp. 128 - 129.

¹²⁸⁷ ‘Azzām, *Al-Khayāl al-‘Ilmī*, p. 92.

¹²⁸⁸ Jacquemond, *Conscience*, p. 22.

¹²⁸⁹ *Ibid.*, p. 24.

that they would produce texts that deal specifically with proselytising the story of the origins of Islam or the Prophet. It is likely that Arabic speculative fiction authors in future may simply choose not to engage with religion, or to skate lightly over it in their work, preferring to concentrate on technological or utopian subjects, but the ‘big picture’ ethos of SF, which provides the opportunity to imagine a better or worse world through the prism of realistic or imaginary scientific advancement, when given an identifiably Arab setting, almost begs the author to engage with how Islam or religious practice fits into this new world.

In conclusion, we look to Homo, the lord of the spinach field, a humanist with a romantic streak and the hero of the most sophisticated and nuanced text in this study. During his first interrogation after absconding from his chain-gang, he retorts in defence of human freedom in response to his interrogators’ ‘doublethink’ assurances that the imprisonment he is experiencing is really freedom:-

You, gentlemen, you kill moral feelings in the citizens...you kill personal freedom by calling it discipline – you prevent outbursts, and hinder the holy human imagination from expressing its rebellion from which creative genius is born...¹²⁹⁰

أيها السادة انكم تقتلون الأحاسيس الخلاقة في المواطنين...انكم تقتلون الحرية الشخصية داخل فكرة الانضباط...و تمنعون النزوات, و تعوقون الخيال الانساني المقدس عن الانطلاق الجامح الذي تولد منه العبقرية الخلاقة...

A fuller study, encompassing all of the major Arabic SF texts, would establish if the “holy human imagination” defended by Homo is ever permitted to challenge or offer alternative narratives to religious faith, or permit a writer of faith to criticise aspects of religious practice.

The texts that have been examined here run the gamut from 1980s space-themed children’s literature to a violent, adult post-Arab Spring dystopia. As many Arab polities remain religiously supported, with Islam as the state religion, and as they change in response to global exogenous shocks and domestic turmoil in response to, among other forces, interior

¹²⁹⁰ Mūsa, *Al-Sayyid*, p. 40.

religious and ‘Islamist’ movements,¹²⁹¹ how Arab futurist or SF literature responds to these changes in their vision of the best or worst possible futures for the Arab world, and how much they depend upon Islam (or upon what particular manifestation of ‘Islam’) as the ‘solution’ will be of great interest.

¹²⁹¹ Perhaps symbolic of the growing public debate on the relationship between science and Islam is the abridged transcription of a debate on Egyptian television between Alexandrian student Ismail Mohammed, Muslim scholar Dr Bakr Awad, and presenter Reham Al-Sahli in September 2013, posted on the website of Media Diversified by Iraqi author Hassan Abdulrazzak on 1 October 2015: <http://mediadiversified.org/2015/10/01/isis-absurd-fanaticism-and-one-way-of-coping-with-it/> Accessed 29.2.16.

Chapter 7: Conclusion

The choice of the texts examined here was largely determined by availability at the outset (in the case of Farouk, the number of texts available in the second-hand bookstands of Ezbekiyya). It is somewhat eclectic, comprised mostly of authors of the periphery, rather than the many novels published by the better-known Omran, or the few longer works of the respected Sherif. The selection spans a period of almost fifty years, beginning with Mahmoud in the 1960s, anchored by two full length novels of 1979 and 1982 respectively, *At-Ṭūfān al-Azraq* (The Blue Flood) and *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), two outliers from 1971 (*Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) and *Al-Jins ath-Thālath* (The Third Sex) the *Milaff* series of children's books beginning in the 1980s, and the most recent, the bold and provocative *Ūtūbiyā* (Utopia) from 2010. Unlike the other texts, the *Milaff* were written for children, but their inclusion is important because of their popularity in their day, and their influence as a popular children's literature.¹²⁹² Although the selection of texts does not include all of the tentative 'Arab SF' canon figured in Chapter 2, nonetheless the material in this sample coalesces to form its own credible literary corpus or miniature canon, a collective organism with distinctive characteristics.

The literature is admittedly a minority literature (*qua* literature; awareness of SF in the region is relatively high, as a result of the success of American SF cinema), produced in countries with relatively low literacy rates and high book prices, and dominated by Egyptian authors, but interest in the genre is growing both 'on the ground' and in academic circles¹²⁹³ (as is interest in the sister-genres or paraliteratures of horror and fantasy).¹²⁹⁴ Arabic SF's status is that of a periphery literature, hampered by lack of literacy and poor distribution, lack of critical respect and publisher enthusiasm, as well as the lack of Arab authors publishing in the

¹²⁹² Amanda Craig makes a persuasive suggestion that it is children's authors, rather than poets (following Shelley's dictum in *A Defence of Poetry* (1821)), are the unacknowledged legislators of the world: http://www.amandacraig.com/pages/journalism_01/journalism_01_item.asp?journalism_01ID=192. Accessed 29.2.16.

¹²⁹³ <http://www.shubbak.co.uk/science-fiction-in-the-arab-world/Shubbak>; conference panel on Arabic Science Fiction, 25 July 2015; Ada Barbaro's full-length study *La fantascienza nella letteratura araba* (Roma, Carocci Editore, 2013). In 2011, English-language SF magazine Apex published a special edition of English-language SF on Arab or Islamic themes: <https://worldsf.wordpress.com/2010/11/03/apex-magazine-special-arabmuslim-issue-released/>. Accessed 29.2.16; the website <http://www.islamscifi.com> has grown to accommodate a variety of developing world SF literature, perhaps in response to the closure of Lavi Tidhar's World SF blog.

¹²⁹⁴ Marla Lynx Qualey, Arabic Literature in English blog entry "For H Day: Arabic Horror Literature?", <http://arablit.org/2013/10/31/for-h-day-arabic-horror-literature/>

genre until now. Even so, this fledgling corpus, such as it is, is very capable of engaging seriously with scientific, social, religious and political hegemonies.

While not wishing to over-state the significance of an admittedly minority literature in a developing region that is frequently in political turmoil, testing the delicate chain of SF continuity across these five decades reveals elements both of a literary evolution tentatively analogous to the pattern of the Western canon, and an outlying deviation from this curve in the shape of Arabic SF's particular relationship with Islam.

The Western genre begin with Verne and Wells' colonialist space fantasies, and developed during the twentieth century by narratising popular concerns about the fruits of technological development in daily life, such as surveillance societies, ever more destructive weaponry, medical advances and resulting ethical dilemmas, body modifications, personal and social freedoms and the position of women (for example, *Brave New World*, 1984), and subverting the early, hopeful Utopias of Butler and Morris, before moving on to express growing public interest in space travel (Asimov, Heinlein) in the 1950s and 1960s. The 1930s saw a reactionary response of religious or spiritual apologists to the perceived militant rationalism of science, defending religion as a valid narrative for both past and future (C. S. Lewis; also Joseph Campbell, editor of *Amazing Stories*, became interested in 'psi powers' in his later years),¹²⁹⁵ followed in turn by a renewed interest in rationalist thought and 'hard' science (Greg Egan, Alastair Reynolds, John M. Harrison). A broadly similar trajectory may be observed in the Arabic genre, although with a more pronounced conservative religious element.

A study of Arabic SF need not be troubled by accusations of neo-Orientalism. Each society responds in its own way to the challenge of modernity and in particular that aspects of (post-) modernity specifically enabled by technological advancement,¹²⁹⁶ and the indigenous outworkings of SF in the Arab (mostly Egyptian) world, although originating from Western

¹²⁹⁵ Brian Stableford, *The Sociology of Science Fiction* (San Bernardino, CA: Borgo Press, 1987), p. 136; this despite his earlier "avoidance of mysticism" because he believed his young male readership would not like it (Campbell favoured 'hard SF' throughout most of his publishing career). Brian Attebery, Chapter 2 "The Magazine Era: 1926 – 1950" in Edward James and Farah Mendlesohn (eds.), (*The Cambridge Companion to Science Fiction*. Cambridge: Cambridge University Press, 2003), p. 38.

¹²⁹⁶ See Csicsery-Ronay, Jr., in Chapter 14 "Dis-imagined Communities: Science Fiction and the Future of Nations" in Victoria Hollinger and Joan Gordon (eds.). *Edging into the Future: Science Fiction and Contemporary Cultural Transformation*, (Philadelphia: University of Pennsylvania Press, 2002), p. 234, on Japan's 'marrow-deep' ambivalence toward postmodernity.

and Russian sources, have their own merit, disproving Kinglake's quaint, yet offensive, views on Arabic literary creativity.¹²⁹⁷

Arab society is not monolithic, and the responses to modernity will vary between wealthy regions and poor ones, between the religiously very conservative, and the more secularist or *laissez-faire*. The 'Arabness' of any given text varies; in the *Milaff*, if we substituted a Neil for a Nūr, the text would remain aggressively pro-Egyptian and patriotic; that is the tone of the *Milaff*, even if its tropes and topics might be the bread and butter of SF (rogue scientists, elixirs, robots and alien attack). The *Milaff*'s elements of nostalgic pharaonism reinforce the self-consciously indigenous pride of the series.¹²⁹⁸ In the other texts, the Arab 'flavour' is less intense; if we substituted a Hugo for Homo in *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), for example (perhaps unnecessarily in this case, as Homo's non-Arab name already signals that he is an Everyman), there would be nothing in the text other than the remaining characters' Arab names that would signify this future world as 'Arab'; the author sets his novel in a world that has progressed beyond national boundaries.¹²⁹⁹

An author's literary output also, arguably, absorbs their personal osmosis of the prevailing public knowledge about technology and their view of its impact upon society, to a certain extent helping to open up an elitist debate to anyone who can read.¹³⁰⁰ The use of time, as well as actual space or locus, is a crucial distinguishing feature of the genre. SF has the same performative functions as fantasy, but crucially differs in the sense of possibility that it offers, taking it out of the purely whimsical sphere, and opening up the possibility of future actuality. A reader of fantasy will never find himself fighting a dragon, although the literary conflict might find a metaphorical application in their life, but, theoretically at least, within the cognitive horizons of the novum, a reader of SF might travel to Mars, or invent an FTL

¹²⁹⁷ Said recalls the Victorian traveller A.W. Kinglake's disbelief in the Arab authorship of the *Arabian Nights* on the grounds that he did not believe Orientals to be capable of such lively creativity. Edward Said, *Orientalism* (Reprinted with a new Preface) (London: Penguin, 2003), p. 193.

¹²⁹⁸¹²⁹⁸ In the sister-genre of fantasy, it is common for authors to weave indigenous folklore into the narrative fabric (for example, Tolkien's references to Icelandic, Norse and classical mythology, or Andrej Sapkowski's use of Polish folklore in popular Polish fantasy series *The Witcher* (also a popular video game), which serve to anchor the texts in their own cultural milieu).

¹²⁹⁹ Marla Lynx Qualey, Arabic Literature in English blog entry, 23 July 2013 "How Can Arab Writers Forge a Space 'beyond national origins'?", <http://arablit.org/2013/07/23/how-can-arab-writers-forge-a-space-beyond-national-origins/>

¹³⁰⁰ Griffiths felt that "Science fiction is a fiction of responsibility precisely because it makes the ordinary man consider problems which are usually the serious concern of only a few." John Griffiths, *Three Tomorrows: American, British and Soviet Science Fiction* (London: Macmillan, 1980), p. 67; also that SF writers should provide the human counterpoint to the social atomism that is facilitated by technology (p. 206).

(Faster Than Light) drive. SF is therefore forward-looking in way that much of the traditional Western-dominated fantasy and gaming world is not; the settings for *Game of Thrones*, *Dungeons and Dragons* and *World of Warcraft* are cod-mediaeval, and their heavily-armed warriors, hyper-sexualised female bodies and pre-industrial settings are more attractive than SF to those who prefer to look backwards for inspiration or simple fantasy fulfilment.

Al-Quwārī's *Min mufakkirah Rajul lam yūlad* (Diary of a Man Not Yet Born) apart, Arabic SF as presented in these texts is distinguished by its fearful and conservative use of the genre, an anxiety that has been expressed in more general terms by Galal Amin, who conflates his fears about the use of technology with unwanted over-engagement with Western influences, identifying the originating source of this 'problem' as Napoleon's framing of his justification for the 1798 invasion of Egypt as a bid to improve the nation by putting his scientist in charge of it.¹³⁰¹ (Fanon had earlier identified a related fear, finding an analogy between the anomie of the colonised nations following colonial withdrawal of technical expertise with Guex's 'neurotic abandonment' theory.)¹³⁰² These fears are mirrored in the early stages of Western SF: Alsford finds that "...a great deal of the most significant early works in [Western] SF deal with traditional Enlightenment issues: knowledge as power; optimism and suspicion as regards the new scientific method; the challenging of traditional limits and taboos..."¹³⁰³

Frederik Pohl described SF as a "modelling problem", a way of exploring various possibilities.¹³⁰⁴ The 'nuts and bolts' of science – the physical applications of disciplines such as medicine and engineering that actively change human experience – provide inspiration for utopian and dystopian examinations of the social, ethical and political changes that they might engender, offering up a rich seam of literary material to the SF writer, whose personal use of a particular idea might be used to engender horror, like Farouk, or promote a peaceful, leisure-filled life, like Al-Quwārī, or conclude with Mahmoud that science is a

¹³⁰¹ Galal Amin, *The Illusion of Progress in the Arab World* (Cairo and New York: The American University in Cairo Press, 2006), p. 157.

¹³⁰² Franz Fanon, *Black Skin, White Masks*. (tr. Charles Lam Markmann) London: Pluto Press, 1986, pp. 72 – 74.

¹³⁰³ Mike Alsford, *What If? Religious Themes in Science Fiction* (London: Darton, Longman and Todd, 2000), p. 14.

¹³⁰⁴ Peter R Bergethon, Chapter "Landscapes of Change: Science, Science Fiction and Advances in Biology" in Donald M. Hassler and Clyde Wilcox (eds.). *New Boundaries in Political Science Fiction* (Columbia: University of South Carolina Press, 2008), p. 11.

“neutral tool” (“سلاح محايد”),¹³⁰⁵ and that the moral value ascribed to its effects is dependent upon the intention of the user.

Juan Cole posits a link between a society’s appetite for SF and the profile of how technological innovation is promoted and embraced within the national consciousness and agenda, controversially drawing a further parallel between the Arab world’s perceived relative lack of commitment to scientific research and their military defeats by Israel.¹³⁰⁶ Arabic SF is a very small corpus, and there are obvious problems of scale in seeking to map such a minority literature onto over twenty nations’ public consciousness of science. Cole’s suggestion, though largely justified in terms of his comments on Arab R&D spending, is only one facet of Khammas’ relative ‘lack’; the literary field is much more greatly affected by factors such as literacy, affordability, publishing and critical responses and the ‘imponderables’ of what makes a particular author decide to write SF, and what makes a particular work or series capture the public imagination.

Science is, of course, just science; there is no such thing as ‘Arab science’ or ‘Muslim science’, as al-Khalili is at pains to explain, though the writers on science in the Arab world quoted in Chapter 4.1 cite instances where governments of Muslim countries have sought to promote science within a specifically ‘Islamic’ context. The popular science/religion oppositional binary, summarised in Stephen Jay Gould’s disputed theory of NOMA (Non Overlapping Magisteria),¹³⁰⁷ is a source of lively debate in any nation with a history of dominance by any form of organised religion, but the implicit challenge in at least offering an alternative narrative to that of Semitic scriptural tradition is one that is clearly keenly felt by some of our authors. (It should be noted that this feeling is by no means confined to the Arab

¹³⁰⁵ Moustafa Mahmoud, *Qir’āt Lil-Mustaqbal* (Reading the Future) (Cairo: Dār Akhbār Al-Yawm, no date), p. 58.

¹³⁰⁶ “I think science fiction is popular where scientific and technological innovation is explicitly part of the national project. Thus, it was produced everywhere in the old Soviet Union, even in largely rural areas like Tajikistan, because scientific modernity and invention was key to what it was to be a Soviet citizen... This major failure to boost research is one of the reasons that they lost militarily and geostrategically to their rival, Israel.” <http://www.juancole.com/2011/08/jordan-plans-green-star-trek-theme-park.html>. Accessed 29.2.16.

¹³⁰⁷ See summary at http://www.stephenjaygould.org/library/gould_noma.html. Accessed 29.2.16; briefly, the theory suggests no intrinsic oppositional binary between the accounts of the universe or human condition suggested by each. Also see Muzaffar Iqbal, *Islam and Science* (Burlington, Vermont: Ashgate Publishing, 2002), p. 297 for a short commentary on monism, dualism and other approaches to the magisterial among Christian theologians.

world, as may be seen in the creationist / evolution / intelligent design debate in the USA.)¹³⁰⁸

Scientific progress offers not only alternative narratives to traditional religion; it also generates and underpins social and political change. Louis Bernal, who popularised science for the masses in 1930s Britain, made an explicit link between science and social progress, opining that science was the chief agent of change in society, but admitted that such change was not without its detractors and reactionaries.¹³⁰⁹ As Asimov suggests,

Technological changes lie at the root of political change. It was the developing Industrial Revolution that placed Western Europe so far ahead from the rest of the world....it is the Industrial Revolution spreadingto Russia and now to China and to India, that has shaken and is destroying European hegemony.¹³¹⁰

This position is enthusiastically held by the Marxist Suvin, who argues that SF develops during “whirlpool periods” of social change;¹³¹¹ Louis Marin even goes so far as to state that Marxism itself as “the science of society” will eventually replace the very need for SF; once a communist Utopia has been established, there will be no need for speculative fiction.¹³¹²

While Towfik and Mūsa boldly critique their contemporary political structures, Mahmoud, Farouk and Al-Baqqāli appear to wish to reassure the reader that ‘there is no place like home’, showing that success in scientific research and development need not undermine Arab society, or its Islamic underpinning. Their work is less of a call for change, and more of a blissful sinking back into the same old thing. Broderick calls this impulse “proleptic

¹³⁰⁸ For an example, see: http://www.salon.com/2012/10/08/least_scientific_members_of_the_house_science_committee/. Accessed 29.2.16. Brian Whitaker suggests that Islamic creationism is not presented as an absolute in the public debate among Islamic scholars (or at least not on the same scale as it is in fundamentalist Christian creationist circles and education providers in the Protestant West; Islamic thinkers show a greater accommodation toward the theory of evolution. See Brian Whitaker, *What's Really Wrong with the Middle East* (London: Saqi Books, 2009 and 2011), pp. 41 – 47.

¹³⁰⁹ Bernal's *The Social Function of Science* quoted in Francis Spufford and Jenny Uglow (eds). *Cultural Babbage: Technology, Time and Invention*. London: Faber and Faber, 1996), pp. 256 – 257.

¹³¹⁰ Isaac Asimov, essay “Social Science Fiction” (1953) published in *Modern Science Fiction, Its Meaning and Its Future*, ed. Reginald Brentnor, (New York: Harper & Row, 1977), p. 166. Brian Whitaker, quoting Benjamin Barber, credits science and technology with the power to compel an open society (although the dystopian genre in its political mode, from 1984 onwards, is concerned with proving the opposite): Whitaker, *What's Really Wrong*, pp. 271 – 272.

¹³¹¹ Darko Suvin, *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre* (New Haven, CT: Yale University Press, 1979), p. 7.

¹³¹² Fredric Jameson, *Archaeologies of the Future: the desire for Utopia and other Science Fictions* (London: Verso Books, 2007), p. 140.

nostalgia”¹³¹³ – an assurance that while in future we confront demons and use new technology, the world remains cosily the same. This is why, in the world of Farouk, Mahmoud and Al-Baqqāli, Islam is unchallenged or vindicated, prayers are still made, and family values remain as they traditionally were. SF, often figured as a literature of change,¹³¹⁴ is more of a literature of conservatism in the Arabic genre.¹³¹⁵

The technological changes that precipitate social change will not do so in a political and cultural climate that militates against their use in this way; a thriving culture of scientific enquiry among a technologically-literate elite in ivory towers will not guarantee similar freedoms in the public or personal sphere. SF’s power as a literature of change can inspire readers’ interest in science, but the very process of experiencing the ‘novum’ and immersion in an alternative world that is associated with the advanced and futuristic itself invites re-thinking of other aspects of society, not necessarily situated in a fantastical future; as Ursula Le Guin says, all SF is really about the present.¹³¹⁶

In earlier chapters, we saw that certain Arab critics favour SF mainly because they hope that it will encourage a new generation of home-grown Arab scientists,¹³¹⁷ presumably with a patriotic agenda for nation building without recourse to foreign expertise, as though the literature’s success might be measured by the number of research scientists produced per thousand readers. There is a didactic element in these texts, but it is primarily spiritual, or minatory. In respect of scientific progress, they generally prefer to warn readers against its harmful effects rather than inviting them to celebrate its beneficial possibilities. Dorota Rudnicka-Kassem quotes Idris’ view that, while he felt that newspapers were the best forum for discussing the future, rather than novels or plays, success in changing the mentality of the people is “the only valid criterion for judging the significance of one’s writing”. Idris’ single

¹³¹³ Damien Broderick, *Reading by Starlight*. (London: Routledge, 1995), p. 25.

¹³¹⁴ See Chapter 1, Footnote 75.

¹³¹⁵ Klein claims that the same social dynamics governed the reaction in France to early SF: fear of change was the reason that SF pulps did not flourish in France as they had done in the USA: Quoted in J-M. Gouvanic, *La Science Fiction Française au Xxe siècle* (1900-1968) (Amsterdam and Atlanta, Georgia: Rodopi, 1994), pp. 132 – 133; also p. 268.

¹³¹⁶ Ursula Le Guin, *A Fisherman of the Inland Sea: Science Fiction Stories* (New York: Harper Prism, 1994), Introduction, p. 5: “What science fiction does is enlarge the here and now.”

¹³¹⁷ ‘Azzām and Al-Sharuni express the hope that SF will promote actual scientific study and achievement: Muḥammad ‘Azzām, *Al-Khayāl al-‘Ilmī fī al-Adab* (Damascus: Dār Ṭalās Lil-Dirāsāt wa al-Tarjama wa al-Nashr, 1994), p. 8; Yusuf Al-Sharuni in *Al-Khayāl al-‘Ilmī fī Al-Adab Al-‘Arabī Al-Mu‘āsir* (Cairo: General Egyptian Book Organisation, 2000), worries about the exodus of Arab scientists to wealthy countries and suggests that it is necessary to promote science in daily life, pp. 287 – 288; at p. 151 he quotes Nihad Sherif as saying that SF was a necessary developmental phase that would encourage a society towards scientific research.

foray into the more nebulous and fantasy-inflected version of the genre might have had this loosely didactic agenda.¹³¹⁸

For Jacquemond, the literature combines *tarbiya* and *tasliya*, education and entertainment, with the weighting in favour of the former because of the ‘science’ element, and the accompanying predictive or prescriptive views of the author.¹³¹⁹

Although a tenuous thread of historical ‘Arab’ continuity can be forced upon Arabic SF from Lucien’s *Vera Historia*, the *Arabian Nights* and the fantastical *mirabile* literature of the mediaeval period, the themes and concerns of SF deal with a modernity that is largely imported, making it a foreign literature¹³²⁰ adapted for domestic consumption. However, this does not make SF a mere collection of epigones, although it might be figured a “bastard child of foreign and indigenous influences”, as Idris spoke of Egyptian modernist theatre. (The same sentiment strikes a chord with Allen and Fedwa Malti Douglas in their study of Arab comics, which ends with a plea for native heroes rather than a bastardisation of European models.)¹³²¹

Mahfouz, the Arab world’s only Nobel literature laureate, consciously strove to imitate Tolstoy in the construction of his *Cairo Trilogy*. For Kendall, “a self-confident Egyptian literature should be able to derive inspiration from Western literature without exposing its writers to accusations of blind Europhilia”,¹³²² and Jacquemond quotes Muḥammad Hussein Haykal (1888 - 1956) on the subject of assimilating foreign literature; his view, expressed in a series of articles published in the 1920s on *al-adab al-qawmi* (national literature), was that the adding of an indigenous element should be enough to render the text ‘respectable’ (my commas).¹³²³ While the surveillance society, joy pills and factory farmed babies of *Al-Sayyid min Haql al-Sabānikh* (Lord of the Spinach Field) clearly recall Huxley’s *Brave New World*,

¹³¹⁸ Dorota Rudnicka-Kassem, “Egyptian Drama and Social Change: A Study of Thematic and Artistic Development in Yūsuf ʿIdrīs’s Plays” (PhD thesis, McGill University, Montreal, 1992).

http://digitool.library.mcgill.ca/R/?func=dbin-jump-full&object_id=39369&local_base=GEN01-MCG02.

Accessed 29.2.16; also published by Jagiellonian University Printing House, Cracow: Montreal-Cracow, 1993, p. 19; ʿIdrīs’ view quoted here (p. 27) was printed in *Al-Ahrām*.

¹³¹⁹ Richard Jacquemond (tr. David Tresilian), *Conscience of the Nation; Writers, State and Society in Modern Egypt* (Cairo: American University Press, 2008), p. 10.

¹³²⁰ Jacquemond, *Conscience* p. 132.

¹³²¹ Allen Douglas and Fedwa Malti-Douglas. *Arab Comic Strips: Politics of an Emerging Mass Culture*. Bloomington, IN: Bloomington Press, 1994), p. 227.

¹³²² Elisabeth Kendall, *Literature, Journalism and the Avant-Garde*. (London and New York: Routledge, 2006), p. 142.

¹³²³ Jacquemond, *Conscience*, p. 11; *Thawrat al-Adab* in *Dar al-Marif*, 1978. See also Gershoni’s book on this.

and the technical paraphernalia and BEMs of the *Milaff* the American pulps of the 1930s, and even Mahmoud's hero Shāhīn transforming into rays recalls *Watchmen*'s Dr Manhattan, with the possible exception of Mūsa, whose text is deliberately universal and not Arab-specific in tone, the Arab SF authors considered here do successfully create an identifiably *Arab* arena in which their Arab characters act out their encounters with modernity.

Reversing the normal direction of the transaction, during a 2015 conference panel on Arabic Science Fiction in London, Yasmine Khan noted that Noura Al-Noman, the Emirati author of *Ajwān* (Gulfs) (2013), has said that she does not wish her work to be translated into English, because she wishes it to remain as part of a notional repository of exclusively Arab-language SF for Arab teenagers (although another panel member, Jonathan Wright, commented that this might be difficult to enforce).¹³²⁴

Robert Scholes, writing in the foreword to Todorov's *The Fantastic: a Structural Approach to a Literary Genre*, suggested that "...genres persist like any convenient codification of cultural behaviour but come into periods of fruition and dominance when most responsive to other cultural needs...".¹³²⁵ This view in respect of Arab literature was shared by Sabry Hafez, who thought that genres tend to emerge as a response to public need, and that translations help ease the strangeness of an imported genre, helping their readership to adjust to new ideas.¹³²⁶ He borrowed an elegant simile from Diana Spearman to describe literary genesis as a process that "resembles a coral rather than a volcanic island".¹³²⁷ The comparison is apt; the *turāth* is the base rock, gradually grown over by agglomerative accretions of organic matter and the numerous microscopic changes that a literature undergoes, not least the inexorable inwash and outwash of literary and conceptual tides bringing new material from far away sources.

¹³²⁴ See webpage on Shubbak festival's conference panel in July 2015: <http://www.shubbak.co.uk/science-fiction-in-the-arab-world/Shubbak>; Noura Al-Noman said in an interview with UAE newspaper *The National* that "Too many young adults are abandoning Arabic literature and exclusively reading English; my six kids and I are a case in point. If an English version is published I suspect no one will bother to read the Arabic. I can't decide." <http://www.thenational.ae/arts-culture/books/the-emirati-sci-fi-novelist-noura-al-noman-on-arabic-versus-english>.

<http://www.thenational.ae/arts-culture/books/science-fiction-for-young-adults-expands-in-the-uae> - Interview with Noura Al-Noman by Alice Johnson, 5 March 2012. Both accessed 29.2.16.

¹³²⁵ Robert Scholes, forward to Tzvetan Todorov, *The Fantastic: a Structural Approach to a Literary Genre* (Ithaca: Cornell University Press, 1975), p. viii.

¹³²⁶ Sabry Hafez, *The Genesis of Arabic Narrative Discourse* (London: Saqi Books, 1993), pp. 105 – 107.

¹³²⁷ Hafez, *Genesis*, p. 29, quoting Diana Spearman, *The Novel and Society* (London, Routledge and Keegan Paul, 1966), p. 236.

As recent Arab SF-inflected novels such Towfik's *Ūtūbiyā* (Utopia) and Al-Noman's *Ajwān* (Gulfs) catch the imagination of a young audience, we have grounds to hope for further flourishings of this new literary growth. Perhaps one day there will be an Arabic Hugo or Nebula prize; it may even evolve its own satirical meta-literature, an Arab *Hitchhiker's Guide to the Galaxy*.

A further in-depth study of the corpus is now needed, while the volume is still manageable, from Al-Ḥakīm's moon romances, to authors not included here, such as Nihad Sherif, Ashrāf Faqīh, Talib Omran, Ra'ūf Wasfy and Muḥammed Al'Ashrī, to mention a few, possibly also encompassing an examination of reception and fan culture.¹³²⁸

Closing remarks come from an Arab critic, and an Arab author. In his 2000 study of SF in contemporary Arab literature, Al-Sharuni wrote in support of the familiarisation and futurist functions of SF:

...unfortunately, traditional realist literature does not wish to deviate from the everyday life we live...and if I am looking for something adventurous and new, then I will leave realist literature and the literature of the current and tangible alone...and go to the literature of the future that we will live...that literature that treads the path of science and brings me out of my familiar life to creative horizons of narrative, images and feelings.¹³²⁹

للأسف أدب واقعي تقليدي لا يريد أن يترك يومنا الذي نعيشه... وإنما أنشد شينا مغائرا مجددا... لذلك فأنا
أهجر أدب الواقع، و أدب الحاضر الملموس... إلى أدب المستقبل الذي سيكون... ذلك الأدب الذي يسير
نهج علمي جرىء ينقلني من حياتي المألوفة إلى آفاق مبتكرة من الرؤى و التصورات و الأحاسيس.

Early in *Al-Sayyid min Ḥaql al-Sabānikh* (Lord of the Spinach Field), Homo is resting during a break from his first interrogation, and pondering the nature and purpose of scientific progress:

¹³²⁸ Suvin attached importance to the genre because it is read mainly by the young and by university graduates, and so affects the avant-garde: Suvin, *Metamorphoses*, Introduction, p.vii; p. 3. This may or may not be the case in the Arab world, but potentially it gives weight to the relevance of a reception-based study. Jacquemond believes that SF, as a 'paraliterature', especially requires a reception-based, sociological, approach (Jacquemond, *Conscience*, p. 165).

¹³²⁹ Yusuf Al-Sharuni, *Al-Khayāl al-'Ilmi fī Al-Adab Al-'Arabī Al-Mu'āsir* (Cairo: General Egyptian Book Organisation, 2000), p. 16.

Men need to develop...from the age of using copper wires for electrical conductivity, to the age of aluminium, the material for aircraft, to the age of titanium, the metal for gas turbines, rockets and space ships...However, modern man must ask: to what end?¹³³⁰

ان البشرية بالضرورة تتطور...من عصر النحاس الأحمر معدن الصناعات الكهربائية...الى عصر
الألومنيوم معدن الطيران...الى عصر التيتانيوم معدن التوربينات الغازية والصواريخ وسفن
الفضاء...ومع ذلك فان من حق الانسان المعاصر أن يتسائل...الى أين؟

Amidst all the technological paraphernalia, political and science-based Utopias and dystopias, and the contested realm of spirituality that still has such importance not just in the Arab world but in the West (even if not in the form of traditional religious practice) that characterise science fiction, this is the question that Arab SF writers, as much as any others, must keep asking.

¹³³⁰ Ṣabrī Mūsa, *Al-Sayyid min Huql al-Sabānkh* (Lord of the Spinach Field), (Cairo: Al-Hay'a al-Miṣriyya al-ʿĀmma lil-Kitāb, 1987 first published 1982), p. 81.

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No. 2 *Ikhtifā' Ṣārūkh* (Vanishing Rocket).

No. 3 *Madinat al-A'māq* (City of the Deep)

No. 6 *Zā'ir min Al-Mustaqbal* (Visitor from the Future)

No. 8 *Al-Irtijāj Al-Qātil* (The Deadly Tremor)

No. 15 *Muthallath Al-Ghumūd* (Triangle of Mysteries)

No. 17 *Nabḍ Al-Khulūd* (Pulse of Eternity)

No. 24 *Al-Ḍaw' Al-Aswad* (The Black Light)

No. 25 *Ṣaḥwat Al-Sharr* (Awakening of Evil)

No. 27 *Al-Fakhh Al-Zujājī* (The Glass Trap)

No. 28 *Al-Nahr Al-Muqaddas* (The Sacred River)

No. 30 *Al-Nār Al-Bārīda* (The Cold Fire)

No. 34 *Waḥsh Al-Muḥīt* (Sea Monster)

No. 35 *Mir'āt Al-Ghad* (Mirror of Tomorrow)

No. 37 *Al-Samā' Al-Muḥluma* (The Dark Sky)

No. 38 *Min Warā' Al-Nujūm* (From Behind the Stars)

No. 39 *Al-Thulūj Al-Sākhina* (Hot Ice)

No. 40 *'Alāmāt Al-Khawf* (Signs of Fear)

No. 42 *Al-Arḍ Al-Thāniya* (The Other World)

No. 46 *Al-Kawkab Al-Mal'ūn* (The Cursed Planet)

No. 47 *Al-Muqātil Al-Akhīr* (The Last Fighter)

No. 48 *Sijn Al-Qamr* (Moon Prison)

No. 49 *Ghazw Al-'Arḍ* (Invasion of the Earth)

No. 50 *Al-Uṣṭūra* (The Myth)

- No. 54 *'Abr Al- 'Uṣūr* (Across the Ages)
- No. 55 *Asra Al-Zaman* (Prisoners of Time)
- No. 56 *Shayṭān Al-Ajyāl* (Satan of the Generations)
- No. 58 *Ma 'raka Al-Kūwākib* (Battle of the Planets)
- No. 60 *Arḍ Al- 'Amāliqa* (Land of the Giants)
- No. 61 *Al-Kābūs* (The Nightmare)
- No. 65 *Ābwāb Al-Mawūt* (Doors of Death)
- No. 66 *Al-Shams Al-Zarqā'* (The Blue Sun)
- No. 67 *Shayṭān Al-Faḍā'* (Satan of Space)
- No. 68 *'Uqūl Al-Sharr* (Evil Minds)
- No. 69 *Al- 'Ālam Al-Akhar* (The Other World)
- No. 70 *Al-Sitār Al-Aswad* (The Black Curtain)
- No. 74 *Al-Ṣirā' Al-Jahannamī* (The Hellish Struggle)
- No. 80 *Al-Naṣr* (Victory)
- No. 81 *Ramz Al-Quwwa* (Symbol of Strength)
- No. 82 *Ḥuṣn Al-Ashrār* (Fortress of Evil)
- No. 83 *Arḍ Al- 'Adam* (Non-Existent World)
- No. 84 *Kanz Al-Faḍā'* (Space Treasure)
- No. 86 *Al-Imbirātūr* (The Emperor)
- No. 87 *Nuṣf Ālī* (Half-Machine)
- No. 90 *Ru 'b Al-A 'māq* (Terror of the Deep)
- No. 91 *Ḍidd Al-Zaman* (Against Time)
- No. 92 *Al-Riḥlat Al-Rahība* (The Terrible Voyage)
- No. 93 *Nuqṭat Al-Ṣifr* (Zero Point)
- No. 95 *Al-Qūwat Al-Sawdā'* (The Black Force)

No. 96 *Budhūr Al-Sharr* (Seeds of Evil)

No. 97 *Lahīb Al-Kūwākib* (Planets Ablaze)

No. 98 *Nīrān Al-Kawn* (The Fires of the Universe)

No. 99 *Al-Infijār* (The Explosion)

No. 115 *Al-'Adūw Al-Khāriq* (The Supernatural Enemy)

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